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ABSTRACT

The handbook reviews Wisconsin's use of the designated vocational instructor (DVI) in providing direct instructional support services for vocational educators and special education students enrolled in vocational education classes. DVIs facilitate cooperative relationships between special and vocational education at the local school level. Eight major categories of responsibility for the DVI in the local school setting are examined in separate chapters: (1) communication with parents, students, ancillary personnel, special educators, vocational educators, administrators, and guidance personnel; (2) consolidation of administrative support; (3) provision of inservice; (4) vocational assessment consideration; (5) effective placement of special needs students in vocational education classes; (6) development of vocationally related IEPs and skill mastery concerns; (7) competency-based instructional considerations; and (8) provision of instructional support. A final chapter briefly addresses such additional considerations as microcomputer application, local DVI evaluation, and effective time management. Resources in the form of activity/procedure suggestions, sample forms, and checklists are provided throughout. (CL)

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DESIGNATED VOCATIONAL INSTRUCTION

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DVI HANDBOOK

A COOPERATIVE PROCESS FOR CHANGE

THE DESIGNATED VOCATIONAL INSTRUCTOR APPROACH TO THE PROVISION OF VOCATIONAL EDUCATION SERVICES TO HANDICAPPED STUDENTS IN A MAINSTREAM VOCATIONAL SETTING

Wisconsin Department of Public Instruction

Herbert J. Grover
State Superintendent

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Bulletin No. 6007

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We wish to acknowledge all of the Designated Vocational Instructors who have willingly and generously shared the knowledge, ideas, and materials which comprise the major portion of this handbook. The 1983 handbook was field tested, and rewritten based on the DVI analysis during the spring workshop of 1984. A content review by Doug Gill followed with revisions by Chris Krueger. Final revisions were made by Steve Gilles in the spring of 1985 with the cooperation of Barb Ballweg.

FOREWORD

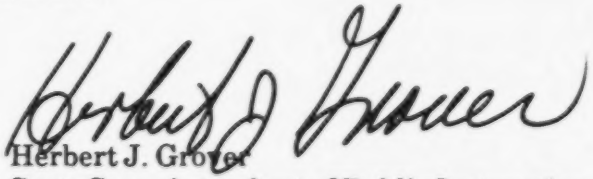
All students have key decisions to make in the process of career development and occupational preparation. Students with exceptional educational needs are entitled to a basic education including a fundamental knowledge of skills necessary for successful employment.

Sixty percent of our youth, including those who drop out before high school graduation, do not go on to other training at a vocational school or university. There can be no question, then, that the local school can help confer on our young people a passport to a productive future. Wisconsin's commitment to education is well established.

From school board members volunteering long hours to set our system's direction, to strong effective administrators who meet the challenges of assuring educational opportunity in a time of diminished resources, to the essential ingredient that makes the system work--our outstanding teachers--our schools are well suited to meeting the changing needs of students in a changing world.

Designated Vocational Instructors can be a catalyst for change. They have the opportunity to provide direct instructional support services for vocational educators and special education students enrolled in vocational education courses.

Neither special nor vocational education alone can meet the employability needs of handicapped students. The concept of the Designated Vocational Instructor approach is one of interdisciplinary cooperation. Its ultimate goal is successful entrance and participation in the world of work.



Herbert J. Grover
State Superintendent of Public Instruction

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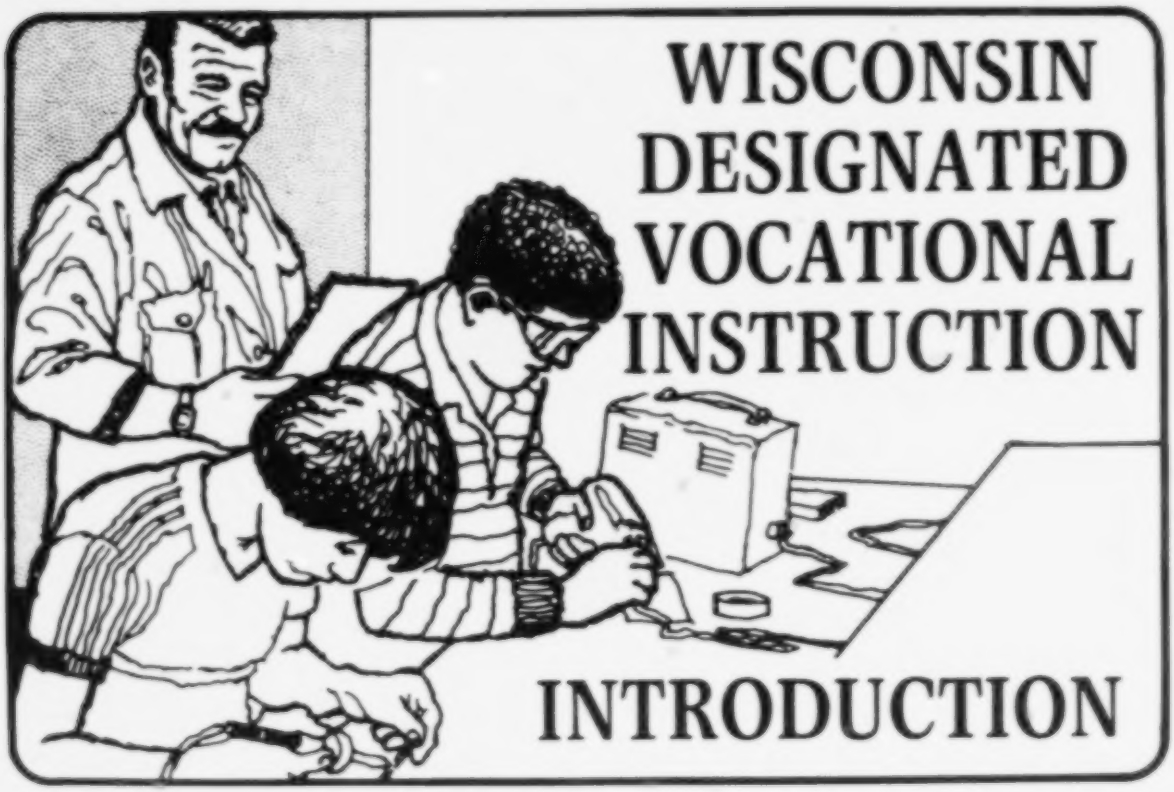


WISCONSIN DESIGNATED VOCATIONAL INSTRUCTION

INTRODUCTION

INTRODUCTION

The Designated Vocational Instruction (DVI) approach in Wisconsin is an interdisciplinary effort between special and vocational education. The overall goal of the program is to significantly improve the scope, sequence and quality of secondary level vocational education for exceptional educational need (EEN) students. As an approach rather than a highly structured program per se, the major strength of designated vocational instruction is vested in its clarity of concept. The concept of the DVI approach, simply stated, is *to successfully integrate special education learners in regular vocational education environments with instructional support provided to both students and their respective instructors.* Therefore, given a diversity of local school district resources throughout Wisconsin, the actual implementation of the concept may vary somewhat from site to site. This variance in terms of implementation is seen as healthy, and allows for the development of local education agency ownership within the confines of the concept and corresponding state guidelines. Follow-up results of the approach since 1981 indicate that this has been a productive arrangement.

During the 1983-84 school year a committee of "in field" DVI personnel were charged with the task of developing a handbook that would describe some key components of the Designated Vocational Instruction approach, and to serve as an on going resource or job guide for new and existing DVI personnel. The guide was field tested for a year, and revised. *Designated Vocational Instruction: A Cooperative Process for Change* represents the fruits of their labors. However, before presenting the contents of the handbook, it may be beneficial to provide a basic overview of:

A. what designated vocational instruction is, and
B. how does designated vocational instruction manifest itself at the local school level.

What is Designated Vocational Instruction? Two specific implementation goals can be identified in relationship to DVI. The first goal is to provide EEN youth at the secondary level with job entry skills in broad or specific occupational clusters. The second goal is to provide a foundation for successful entry and participation in a post-secondary vocational education setting. In conjunction with these two major goals, four specific objectives have been developed. They are:

1. To implement the designated vocational instruction program for secondary handicapped learners.
2. To provide the secondary handicapped learner with the opportunities to successfully enter and participate in all existing vocational education programs at the level nearest the individual student's needs and abilities.
3. To monitor the handicapped learner's entry and participation in existing vocational education programs.
4. To provide instructional support needed to utilize vocational programs.

With these goals and objectives in mind, the Designated Vocational Instructor serves as the facilitator for a meaningful, cooperative relationship between special and vocational education at the local school level. DVI personnel possess special education teaching certification and are provided with additional staff development training during the summer preceding the first year of DVI initiation through selected institutions within the University of Wisconsin System and under the guidance of the Department of Public Instruction. On-going inservice sessions, as well as support visits are also provided for DVI personnel throughout the year.

Some of the key decision points in the process of providing vocational education to handicapped persons are included in Figure 1. This figure represents movement from an awareness of possible career options through the attainment of competitive employment or enrollment in post-secondary vocational training. Certainly there are many steps involved in the decision-making process, but this chart is only designed to reflect a series of outcomes rather than the routes taken to achieve them. At any rate, the decision points help to target major areas of emphasis for DVI personnel in a sequential order. The role of the DVI relative to Figure 1 is to assist all appropriate parties in dealing with these key decision points.

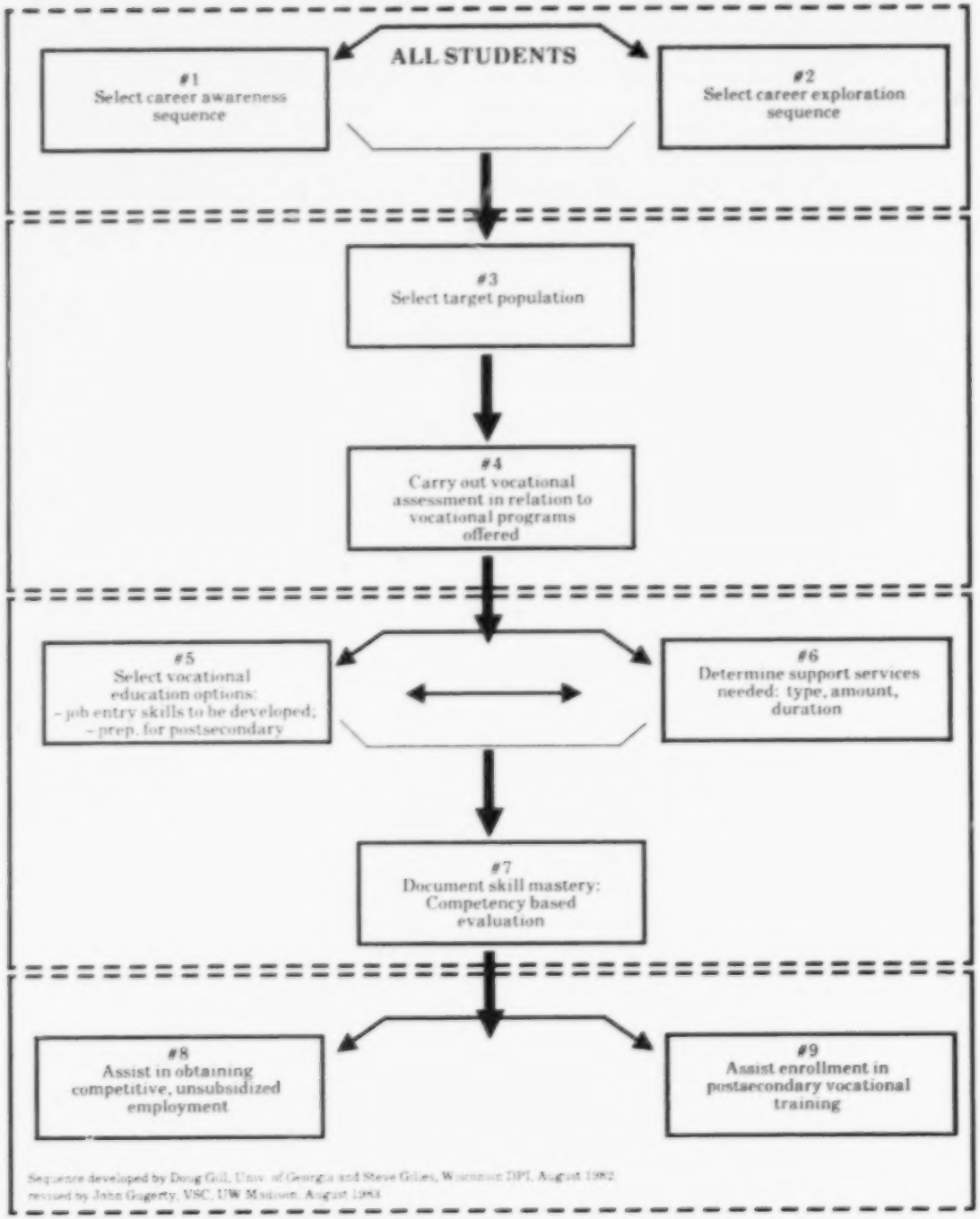
Federal mandates for vocational education of handicapped learners, and the current emphasis on transitional type programming have challenged the traditional views of both special and vocational education in Wisconsin, and have prompted an integrated approach to dealing with the EEN learner in the vocational setting. Designated vocational instruction presents an articulated approach to meet that challenge.

How Does Designated Vocational Instruction Manifest Itself at the Local School Level? There appears to be at least eight major categories of responsibility that are associated with the DVI role in the local school setting. These areas of responsibility are: (1) communication; (2) consolidation of administrative support; (3) provision of inservice; (4) vocational assessment consideration; (5) effective placement of EEN students in vocational education classes; (6) the development of vocational related IEPs and skill mastery concerns; (7) competency-based instructional considerations; and (8) providing instructional support. A brief overview of each of these eight categories will attempt to show their relationship to the DVI concept.

Communication has been identified by practicing DVIs as a major factor in successful application of the concept. The use of formal and informal communication systems will assist in program implementation and accountability when specific techniques are well defined.

Research conducted in the follow-up of early DVI pilot sites indicate that the consolidation of administrative support is another major factor in the successful implementation of designated vocational instruction. Administrative support provides an operational framework for DVI, as well as credibility within the school and community. Functional DVI programs will consolidate necessary administrative support in a realistic manner.

FIGURE 1: Key Decision Points in the Process of Providing Vocational Education to Handicapped Persons



Sequence developed by Doug Gill, Univ. of Georgia and Steve Gilles, Wisconsin DPI, August 1992
revised by John Gugerty, VSC, UW Madison, August 1993

Designated Vocational Instructors have accurately been described as change agents, and the systematic incorporation of DVI principles should result in substantive changes in the delivery of vocational education to exceptional educational needs students. Implementing these changes can be enhanced through the provision of effective and efficient inservice activities. Formal and informal inservice must be provided to ensure qualitative program initiation and refinement.

Continuous assessment is a key element in the appropriate planning and preparation for exceptional educational needs students. A sound approach to vocational assessment, relative to program placement, skill acquisition and readiness for work, is integral to any programmatic approach. Designated vocational instruction is no exception.

Effective placement in vocational education classes should occur with greater frequency as the DVI effects positive change in the delivery of services to individual students. Issues surrounding this area include using a team approach for making placement decisions, course selection and sequence, and developing post high school vocational related goals.

The development of vocationally related IEPs and the subsequent skill mastery concerns that result should evoke some procedures that speak directly to this area of responsibility. The cooperative development of the vocational education aspects of the IEP should incorporate relevant assessment data, corresponding goal statements, and specific skill mastery targets for a given vocational area.

A measurable definition of curriculum can be found within the realm of competency-based instruction. Competency-based instruction may be used prior to vocational placement from a special education perspective, and in measuring student growth from a vocational education standpoint. Familiarity with some characteristics and procedures for establishing such an approach can be valuable information for DVI personnel.

Obviously, one of the major components of the DVI process is the provision of direct and/or indirect instructional support to vocational education teachers who are ultimately responsible on a daily basis for the EEN students enrolled in their classes. The parallel instruction that accommodates the special education student concurrently enrolled in vocational education is of the utmost importance. A DVI also engages other special education teachers in the instructional support function of the DVI concept.

The eight major areas of responsibility briefly described in this section form the core of duties assigned to the Designated Vocational Instructor. However, there are other considerations that will impact on the total effectiveness of the position. These additional considerations would include: microcomputer applications, time management techniques, the effective utilization of advisory committees, and a process for local DVI evaluation in both a formative and summative sense.

After the initial pilot year in 1981-82, the DVI concept in Wisconsin has continued to grow, expand and flourish. Its functional approach to interdisciplinary cooperation can easily be misinterpreted as simplistic. It is anything but, as on-site personnel will readily attest. Each of the eight major areas of responsibility alluded to in this introduction will be explored in greater detail throughout the remainder of this handbook, as well as the additional considerations that have been mentioned. Each topical area uses a standard format of explanation together with selected examples to help illustrate the narrative. The reader is encouraged to explore the contents of each section independently to acquire a flavor for the given responsibility areas; then use the accompanying examples to fashion their own response to a particular area of need. In this manner, *Designated Vocational Instruction: A Cooperative Process for Change* can be a continual source of information and assistance.

SECTION ONE: COMMUNICATIONS

COMMUNICATION

Communication is often a key factor in the success or failure of any venture. Based upon previous experience with the DVI approach, effective communication is an essential factor in the successful implementation of the DVI model. A telephone survey of Wisconsin's designated vocational instructors resulted in the identification of communication as a key element in the success of the DVI model.

Successful implementation of the DVI model is dependent on communication between the many individuals involved with the DVI approach and touches on each aspect of the entire process. The responsibilities of the DVI which are related to communication can be illustrated as shown in Figure 2.

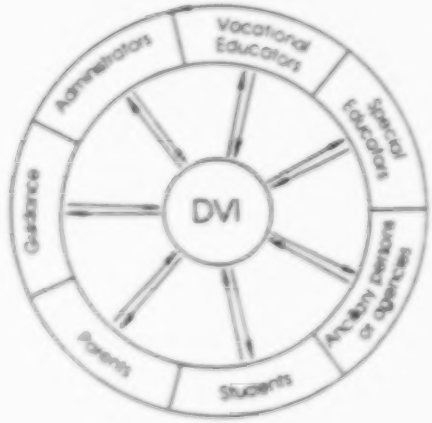


FIGURE 2
The Communication Network in the DVI Approach

Basically the DVI is responsible for:

- Communicating with persons responsible for the vocational education and placement of students with EEN. This is represented in the figure by the arrows.
- Facilitating communications between persons providing services to students with EEN. In Figure 2 this is represented by the perimeter of the wheel. The DVI must keep the channels of communication open for all parties involved in the process.

A number of benefits can be anticipated if the DVI is successful in maintaining a good communication network. A few of the advantages that result from effective systematic communication include:

- The development of administrative support.
- Ensuring vocational education participation on the M-Team and in the IEP process.
- Facilitating communication between vocational educators, special education instructors, and/or ancillary school personnel or community agencies.
- Enhancing the quality of vocational education services offered to EEN students.
- Fostering community support for the DVI Approach.

Communication Strategies

Reaching the goal of an effective communication network requires a good deal of thought, time, and effort. In an attempt to assist the DVI in realizing this objective, a number of activities and helpful hints have been identified and related to the following components of the DVI approach: administrators, vocational educators, exceptional educators, guidance, local vocational education coordinators, students, parents, advisory committees, community agencies, IEP development, pre-instruction activities, DPI, program promotion and explanation, and M-Team involvement.

Administrators

Activities

A. Continue staff development workshops

B. Share DVI plan-of-action

C. Keep administrators informed

D. Inform administration of exemplary efforts by vocational education staff and EEN staff

E. Be sincere

F. Recommend continued DPI site visits

G. Clarify DVI role and concept

H. Develop annual plan including objectives and activities

I. Use effective listening and problem solving skills

J. Encourage administrative participation on DVI advisory committee

Helpful Hints/Resources

1. Be aware of chain of command and staff personalities in your district
2. Suggest possible solutions as necessary
3. Set-up regularly scheduled informative updates (oral and/or written)
4. Actively seek advice and input within the parameters of the concept

Vocational Education

Activities

A. Obtain written documentation of student's performance

B. Use informal (verbal) communication

C. Use formal communications (See Resource C)

D. Provide positive reinforcement to vocational education for their efforts and for successful methods and modifications

E. Use Vocational Education Department meetings to:
   1. Provide progress report on DVI
   2. Obtain input
   3. Brainstorm for resolutions to problems

F. Facilitate direct communication between EEN teachers and vocational education instructors

Helpful Hints/Resources

1. Maintain confidentiality/professionalism
2. Use simplified forms
3. Student ability will determine frequency of documentation
4. Provide immediate follow-up in school with parents or with appropriate outside agencies
5. Follow through. If you say you are going to do something,do it.
6. Hold workshops involving vocational and special educators
7. Use team approach
8. Give all persons contacted consistent information

G. Provide direct instructional support on regular basis

H. Provide meaningful alternatives

I. Clarify DVI role

J. Promote open access between DVI's classroom and vocational education labs

9. Be positive

10. Be available

11. Get to know students as individuals

Exceptional Education

Activities

A. Facilitate communication between special education and vocational education staff

B. Provide calendar of scheduled meetings and updates

C. Provide open access between classrooms of the DVI and other special education instructors

D. Clarify DVI role

E. Develop team approach by facilitating communication within special education department

F. Use special education department meetings

Helpful Hints/Resources

1. Get to know your peers

2. Provide positive reinforcement when appropriate

3. When possible, use visual aids such as flowcharts to illustrate what you mean

4. Demonstrate follow-through on suggestions of staff

5. Personal contact is generally more meaningful than memos

Guidance

Activities

A. Work cooperatively to determine appropriate scheduling and future vocational education/post secondary/on-the-job enrollments

B. Interchange information regarding vocational assessment or student's present level of functioning

C. Encourage members of guidance staff to provide vocational counseling

Helpful Hints/Resources

1. Clarify terms and acronyms used for both vocational education and special education

2. Identify characteristics of students served

3. Get to know your guidance counselors

4. Share appropriate materials (tests, etc.)

5. Plan for schedule changes as early as possible

D. Serve as a member of the M-Team

E. Clarify DVI role

6. Personal contact is generally more meaningful than memos

Local Vocational Education Coordinator (LVEC)

Activities

A. Keep informed regarding implementation of DVI approach

B. Consult regarding funding

C. Obtain information regarding the vocational curriculum

D. Clarify DVI role

E. Use as a resource for selling the DVI approach

Helpful Hints/Resources

1. Update programs regularly
2. Seek input and involvement
3. Provide steady and consistent information flow

Student

Activities

A. Provide direct and indirect instructional support

B. Coordinate ancillary services

C. Provide student with feedback regarding skill mastery and competencies needed for employment and current progress in vocational classes

D. Clarify DVI role

E. Provide the student the opportunity to assess and comment on progress and concerns in vocational education classes

Helpful Hints/Resources

1. See section on "Instructional Support"
2. Resource E, "Ways to Say You're Doing OK"
3. Provide appropriate occupational reading and prevocational instruction
4. Attempt to show relevance for all classroom related activities
5. Coordinate instruction in both vocational and special education settings

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Parents

Activities

A. On a regular basis, provide parents with up-dates regarding students' progress

B. Provide opportunity for parents to express their concerns

Helpful Hints/Resources

1. Don't wait for a crisis; tell parents when some-thing positive happens
2. Resource F, Form Letter to Parents
3. Include parent on advisory committee

C. Include parent in decision-making process

D. Provide parents with information regarding the DVI Approach--how it can enhance their child's educational opportunities

---

Advisory Committees

Activities

A. Obtain member's input and direction as related to needs of local education agency

B. Keep members informed

C. Participate on vocational education advisory committees

D. Serve as a resource person for best meeting the the special needs of students with EEN

E. Improve awareness of interests and needs of students with EEN

F. Represent the interests of students with EEN

G. Serve as an advocate for vocational education

Helpful Hints/Resources

1. See section on "Advisory Committees"

2. Remember they can help the DVI gain popular and administrative support. NOTE: (Participants should include but not be limited to: DVI, LVEC, Dir. of Spec. Ed., high school principal, guidance rep., vocational educator, parent, community leader, and school board member)

Community Agencies/Organizations

Activities

A. Serve as liaison between high school and other post school agencies such as VTAE, Job Service and DVR

B. Use as resources such agencies that can support the student

C. Be informed about services available through outside agencies

Helpful Hints/Resources

1. Utilize key people for guest speakers and field trips

Individualized Educational Plan (IEP)

Activities

A. Facilitate communication between vocational education teacher and DVI by jointly determining IEP objectives

Helpful Hints/Resources

1. Schedule conferences based on mutual convenience of everyone involved

B. Assist in determining vocational objectives through the use of one or more of the following:
   1. Competency lists
   3. Course descriptions
   4. Course requirements
   5. Information concerning individual student's strengths and weaknesses

2. Be prepared--indicate possible areas of difficulty
3. Ask vocational educator for input of possible course modifications
4. See section on "Competency-Based instruction"
5. Reduce amount of "educationese"

Prior-to-Instruction

Activities

A. Obtain a list of EEN students enrolled in vocational education courses from EEN teachers

B. Have EEN teachers provide information concerning student's strengths and weaknesses

C. Provide vocational education instructors with notification of EEN students enrolled in vocational classes

D. Provide written information regarding EEN students abilities to vocational teachers

E. Convey important information regarding skills attained in previous classes

F. Provide informal inservice

G. Clarify DVI role

H. Increase awareness of learning styles

Helpful Hints/Resources

1. See Resource G, "Communication Report"
2. See Resource H, "EEN Notification Program"

Designated Vocational Instruction and the Department of Public Instruction

Activities

A. Obtain technical services and support visits as needed

B. Gather information

C. Use DPI news releases

Helpful Hints/Resources

1. Attend scheduled staff development activities

Promoting and Explaining DVI Program

Activities

A. Provide news releases

B. Use of newsletter

C. Use DVI Advisory Committee

D. Send copy of minutes/agenda to key people

E. Participate in Vocational Education Advisory committees

F. Employ graphics arts/journalism/art departments

G. Slide presentation to parents/community organizations/school board/freshmen orientation/small group meetings

H. Inservice

I. Seek resources for dissemination purposes

J. Speaking engagements

Helpful Hints/Resources

1. See section "Advisory Committee"

2. See section "Inservice"

M-Team Involvement

Activities

A. invite and encourage vocational education teachers to attend M-Team

B. Explain M-Team process to vocational educator prior to staffing

C. Share specific information about student before M-Team

D. Ask vocational education instructor to identify prerequisite skills and competencies necessary for successful entry and participation in vocational education classes

Helpful Hints/Resources

1. Use of checklists

2. Help to move meetings along efficiently

3. Gather as much information as possible prior to meeting

RESOURCE A

DVI Memo to Vocational Instructors

TO: Vocational Instructor

FROM: Designated Vocational Instructor

RE: Student in your Mainstream Vocational Class

DATE:

Does student need special assistance in your class this week?

_____ yes _____ no

Do you have material or tests that need modification?

_____ yes _____ no

Will you need assistance from the DVI in your classroom planning this week?

_____ yes _____ no

Please return this to my mailbox.

THANKS!!

RESOURCE B

Memo from Vocational Educator

TO:

FROM:

STUDENT:

REGARDING:

_____ Student progress

_____ Behavior

_____ Past assignment

_____ New assignment

_____ Test

_____ Lab exercise

_____ Resource assistance

COMMENT:

CONTACT ME: _____ Immediately

_____ Before _____

_____ At your convenience

This form can be reproduced and put into tablet form. A tablet is then given to each vocational education instructor. They put completed forms your mailbox.

RESOURCE C

Introductory Memo from DVI

WHO: (Name)

WHAT: Designated Vocational Instructor

WHEN: School Year

WHERE: _____High School

WHY: To help EEN students successfully participate in existing vocational education programs by providing instructional support to EEN students and vocational education teachers.

_____ High School was selected to participate in the Designated Vocational Instruction approach, a state sponsored pilot project. This selection was based on the high caliber and the past cooperative efforts of the vocational education and special education instructors.

I appreciate your help and cooperation. I hope that, together, we can make this a successful program by being mutually supportive of each other and the students we work with.

Your efforts have not gone unnoticed. Thanks for:

1. Allowing students to use your lecture notes
2. Completing competency lists
3. Emphasizing quality, not quantity
4. Developing individual programs
5. Tutoring students during your prep time
6. Providing student with written and oral directions
7. Counseling students
8. Capitalizing on student's interests
9. Working with DVI and Special Education teachers
10. Everything. . .especially your involvement

If you have any suggestions for improving DVI, please let me know.

Again, thank you.

(Your Name)

RESOURCE D

Personality Profile

Name:	Date:
Address:	
Telephone No.:	Birth Date:
Grade:	Form completed by:

Approximate Function Level	Reading Vocabulary	Reading Comprehension	Spelling	Math Computation	Recent Achvmt Test Scores
3rd Grade (or below)					
4th Grade					
5th Grade					
6th Grade					
7th Grade					
8th Grade					
**********	**********	**********	**********	**********	**********
9th Grade					
10th Grade					
11th Grade					
12th Grade					

1. Compared to _____ability level _____is functioning:

   a. at an appropriate level
   b. slightly lower than what would be expected
   c. much lower than what would typically be expected
   d. beyond what would typically be expected
   e. other comments

   _____

2. Specific Areas of Concern:

   a. poor ability to follow verbal directions
   b. generally unable to organize assignments
   c. has difficulty on tasks that require manual dexterity (i.e. fine motor coordination)
   d. has difficulty understanding language used by teachers to present information in the classroom
   e. forgets factual information very quickly
   f. has difficulty remembering information over long periods of time (i.e. 2-3 weeks)

g. has difficulty generalizing information to different settings
h. has difficulty pulling ideas together into a common theme
i. other

_____

3. Physical Disabilities (medication)
Comments:

4. Learning Style -- Student generally:

_____ Motivated	_____ Needs structure	_____ Needs reinforcement
_____ Unmotivated	_____ Enjoys school	_____ Dislikes school
_____ Values assistance	_____ Typically does not ask for help	_____ Avoids teacher contact
_____ Fears failure	_____ Appears unmotivated by grades	_____ Has difficulty interacting in a group
_____ Has difficulty speaking in front of a group		

5. Previous and Current Adaptations in Programs:

Special Education (Learning _____'s Room)
(Behavioral _____'s Room)
(Language _____'s Room)

Remedial Reading
Remedial Math
Previously Retained in _____th grade
Other Adaptive Programs

_____

Comments:

6. Special Areas of Interest:

7. Other Areas of Concern:

RESOURCE E

Ways to Say You're Doing OK

That's really nice.
Thank you very much.
Wow!
That's Great.
I like the way you're working.
Keep up the good work.
That's quite an improvement.
Much better.
Keep it up.
What neat work.
You really outdid yourself today.
Congratulations, you got _____ right!
That's right! Good for you.
Terrific.
I bet you are proud of the job you did on this.
Beautiful.
I'm very proud of the way you worked (are working) today.
Excellent work.
I appreciate your help.
Very good. Why don't you show the class?
Thank you for (sitting down, being quiet, getting right to work, etc.)
Marvelous.
Right on!
Fantastic.
All right!
Teach me (or _____) how to do that.
For sure.
Sharp.
That looks like it's going to be a great report.
I like the way _____ is working.
My goodness, how impressive!
You're right on the track now.
That's "A" work.
_____ got right down to work.
_____ is paying attention.
It looks like you put a lot of work into this.
That's clever.
Very creative.
Very interesting.
Good thinking.
That's an interesting way of looking at it.
Now you've figured it out.
That's the right answer.
Now you've got the hang of it.
Exactly right.
Superior work.
That's a good point.
That's a very good observation.
That certainly is one way of looking at it.
That's an interesting point of view.
Thank you for raising your hand, Charles, what is it?
You've got it now.
You make it look easy.
That's coming along nicely.
Nice going.
I like the way the class has settled down.

Compiled by Edward S. Kubany, Clinical Psychologist, Honolulu, for the Child Service Demonstration Center, Hilside School, Route 3, Cushing, OK 74023.

Additional Ways to Say Very Good

You've got it made.
That's RIGHT.
You're on the right track now!
That's GOOD!
You are very good at that.
That's coming along very nicely.
That's much better!
GOOD WORK!
You're doing a good job.
You've just about got it!
THAT'S IT!
Congratulations!
I knew you could do it.
That's quite an improvement.
Now you have it.
Not bad.
GREAT!
You are learning fast.
Good for you!
You make it look easy.
You really make my job fun.
That's the right way to do it.
You're getting better every day.
You did it that time!
That's not half bad!
WOW!
That's the way!
Nice going.
SENSATIONAL!
You haven't missed a thing.
That's the way to do it.
That's better.
Nothing can stop you now!
That's first class work.
EXCELLENT!
PERFECT!
That's the best ever.
You're really going to town.
FINE!
Nice going.
OUTSTANDING!
You did very well.
You're really improving.
Good remembering!
I'm happy to see you working like that.
You've just about mastered that.
You're really working hard today.
I'm proud of the way you worked today.
That's the best you've ever done.
You're doing that much better.
Keep working on it, you're good.
Couldn't have done it better myself.
Now that's what I call a fine job.
You must have been practicing!
You're doing beautifully.
SUPERB!
Keep it up!
You did a lot of work today.
You've got that down pat!
You certainly did well today.
TREMENDOUS!
You're doing fine.
Good thinking!
You are really learning a lot.
Keep on trying!
You out did yourself today!
I've never seen anyone do it better.
Good going!
I like that.
One more time and you'll have it.
I'm very proud of you.
That's a good (boy/girl).
I think you've got it now.
Good job, (student's name).
You figured that out fast.
You remembered.
It's a pleasure to teach you when you work like that.
You're right.
CLEVER!
That makes me feel good.
Way to go.
Well, look at you go.
Now you have the hang of it.
You've got your brain in gear today.
WONDERFUL!
Super!

Compiled by the Vocational Studies Center, University of Wisconsin-Madison (ACLD, January-February, 1983.)

RESOURCE F

Form Letter to Parents

Dear Parent:

The faculty at _____ High School is constantly striving to recognize outstanding classroom performance and good school citizenship. It is with this in mind that _____ is being commended for

_____

_____

_____

_____

SUBJECT: _____

ACTIVITY: _____

_____ Teacher

RESOURCE F

Form Letter to Parents

Dear Parent:

This letter is to inform you that _____ is presently having difficulty in the following subject. _____

_____

CAUSES FOR THE DEFICIENCY:

ABILITY

_____ Poor aptitude in subject
_____ Inadequate foundation in subject
_____ Lack of effective motivation

ATTITUDE

_____ Poor attendance, tardiness
_____ Inadequate preparation/class
_____ Lack of serious approach to studies

PERFORMANCE:

_____ Poor test scores
_____ Inadequate written homework or notes
_____ Lack of attention or participation

RECOMMENDATIONS:

_____ If possible, do this homework early in the evening
_____ Improve classwork
_____ Work with teacher after school

COMMENTS:

_____

_____

_____

We would appreciate your help and cooperation with this problem. Any assistance you may be able to give will be of value.

_____
Teacher

RESOURCE G

Communication Report

NAME _____ GRADE _____ DATE _____

RESOURCE ROOM TEACHER _____

ACADEMIC STRENGTHS

_____

_____

ACADEMIC WEAKNESSES

_____

_____

VOCATIONAL ASSESSMENT

_____

_____

_____

_____

Learning Problems

ORGANIZATION

_____ becoming interested
_____ getting started
_____ paying attention/spoken word
_____ paying attention/written word
_____ following direction
_____ keeping track of materials/assignment
_____ staying on task
_____ completing task on time
_____ working groups
_____ working independently

LISTENING/SPEAKING

_____ learning by listening
_____ expressing self verbally

READING

_____ reading textbooks
_____ reading study sheets/tests
_____ understanding what is read

WRITING

_____ writing legibly
_____ expressing self in writing
_____ spelling

THINKING

_____ seeing relationships
_____ understanding cause and effect
_____ anticipating consequences
_____ drawing conclusions and making inferences
_____ remembering

Behavior Problems

_____ coming to class on time
_____ coming to class prepared
_____ getting started
_____ following directions
_____ staying on task
_____ staying in seat
_____ completes task on time
_____ participating in class discussion
_____ interrupts or talks in class
_____ uses inappropriate language

_____ verbally disrespectful
_____ harasses other students
_____ abuses property
_____ cheating
_____ is set up by other students
_____ daydreams
_____ demands attention
_____ working independently
_____ working in groups

RESOURCE H

EEN Notification Program

TO: STAFF MEMBERS WHO HAVE A LEARNING DISABLED STUDENT IN THEIR CLASSROOM

FROM: LD TEACHER

_____ has been identified as Learning Disabled. _____ is enrolled in your _____ class, _____ hour. During the M-team evaluation, this student's reading level was assessed at _____. Adding to this low reading level may be a lack of organizational skills, poor study skills and often times poor penmanship. Although the student has a set curriculum within my program, I would like to assist this student to accomplish the goals of your curriculum also. Please notify me of unit tests or projects that you may have in your program. I will be contacting you as to specific help for this student within the next week.

RESOURCE I

Barriers to Interpersonal Communication

Communication is more than conversation or talking. Everybody talks, but not everybody communicates. Communication involves the exchange of attitudes, feelings, and ideas, and a full understanding of the other person's position. It does not imply agreement between or among the communicators.

One of the problems in communication stems from improper listening. The first step in overcoming inappropriate listening is to be aware of attitudes or actions that defeat the process. Several of these are:

1. **I must defend my position**. This is more of an attitude and mental process than an overt behavior. The person speaking has mentioned a point or position that threatens the listener. The listener, to maintain their position or identity, meets the threat by creating a mental debate or by lining up statements to use in their own defense. Consequently, while defending themselves they are not listening to what the speaker is saying; or they are only intermittently listening.

2. **I'm looking for an entrance into the conversation**. This is an attitude which precludes an interest in what is being said. The person is more concerned about finding an opportunity to present what they want to contribute.

3. **I just don't have time**. This attitude can develop from the pressures of other interests. It is often conveyed to the speaker by an emotional and/or physical indication that the listener is not paying attention. The lack of interest (sometimes expressed by verbal attempts to hurry the person talking) puts the speaker on the defensive. If a listener doesn't have time at the present or isn't in the appropriate frame of mind, they should tell the speaker and arrange a convenient time to resume the conversation.

4. **I already know what you have to say**. This attitude is based on the premise that the patterned responses we get used to will never change. It assumes that the feelings of the speaker are the same yesterday, today, and forever. People do not change their beliefs, attitudes, and behavior. We must be attuned to and expect such periodic shifts.

5. **My position is correct — I'm not about to change**. This stubborn attitude is often conveyed to the speaker and limits their ability to express themselves. The speaker may become discouraged because the other person's mind is closed to alternate viewpoints. "Don't confuse me with facts; my mind is made up."

6. **I know what you should do (advice giving)**. Very seldom do people want advice--even when they ask for it. Most often the speaker just wants to get the listener's reaction (support or confirmation) of the solution they have already thought about. When the listeners have the attitude that they know what the speaker should do, they deceive themselves. No one knows the thoughts and feelings of another. This attitude cuts the listener off from hearing what the speaker is saying by substituting advice for attention.

7. **How am I coming through**. This attitude implies the idea that the listener is far more concerned about their contribution to the conversation or acceptance in the relationship than about the speaker's needs. Most people can only handle feelings and ideas that go in one direction at any one time. When people are more concerned about themselves than others, they don't listen.

RESOURCE J

The Listening Techniques

A. Barriers and Roadblocks to Listening

Here is a list of poor listening habits based on the research of Dr. Ralph Nichols together with some suggestions as to how these habits might be corrected.

1. **On-off listening**. This unfortunate habit in listening arises from the fact that most individuals think about four times as fast as the average person speaks. Thus, the listener has (3/4) of a minute of spare thinking time for each listening minute. Sometimes they use this extra time to think about their own personal affairs, concerns, and troubles instead of listening, synthesizing, and summarizing what the speaker has to say.

2. **Red flag listening**. To some individuals words are like the proverbial red flag to the bull. When we hear them we get upset and stop listening. These terms vary in every organization. However, to some individuals, "communist," "budget," "main office," "new procedure," and the like are signals to which we respond almost automatically. When this signal comes in we tune out the speaker. We lose contact with them and fail to develop an understanding of them.

3. **Open ears--closed mind listening**. Sometimes we decide rather quickly that either the subject or the speaker is boring and what is said makes no sense. Often we jump to conclusions that we can predict what they know or what they will say, thus, we conclude, there is no reason to listen because we will hear nothing new if we do. It is much better, of course, to listen and find out for sure whether this is true or not.

4. **Glassy-eyed listening**. Sometimes we look at a person intently and we almost seem to be listening although our minds may be on other things or on far distant places. We drop back into the comfort of our own thoughts. We get glassy eyed and often a dreamy expression appears on our faces. We can tell when people look at us this way. Similarly, they can see the same in us and we're not fooling anyone. Such wool gathering should be postponed for other times.

5. **Too deep for my listening**. When we are listening to ideas that are too complex and complicated, we should force ourselves to follow the discussion and make a real effort to understand it. It is possible, of course, that we might find the subject and speaker to be quite interesting when we listen and understand what they are saying.

6. **Matter-over-mind listening**. People do not like to have their pet ideas, prejudices and points of view overturned. Many do not like to have their opinions and judgments challenged. Consequently, when a speaker says something that clashes with what we think, believe, and hold a firm to, then we may unconsciously stop listening or even become defensive and plan a counter-attack. Even if we want to do this, it is better to listen, find out what they think, get the other side of the question so we can do a better job of understanding and replying to it.

7. **Be subject centered instead of speaker centered**. We should concentrate on the message and not the person. If we pay too much attention to what the speaker says or how they say it then we may not get the message and understand its meaning.

8. **Fact listening**. Often as we listen to people we try to remember the facts and repeat them over and over again to drive them home. As we do this, frequently the speaker has gone on to new facts and we lose them in the

process. It is best to try to remember only the most important facts and the main ideas. It is a fundamental principle of learning that facts will not be remembered unless they are used. If you have the key facts, you can usually fill in the intermediate ones anyway.

9. **Pencil listening**. When you try to put down on paper everything the person says, then you are bound to lose it because the speaker's words come out faster than you can write them. It is best to jot down only the key words and to put them down in outline form and that will give you enough to go on.

10. **Hubbub listening**. Usually there are many distractions when we listen--noise, movement of people, or other matters clamoring for our attention. We must practice tuning out these distractions and concentrating on what the speaker is saying.

B. Objectives in Listening

The objectives when we listen to people are both basic and simple.

1. We want people to talk freely and frankly.

2. We want them to cover matters and problems that are important to them.

3. We want them to furnish as much information as they can.

4. We want them to get greater insight and understanding of their problem as they talk it out.

5. We want them to try to see the causes and reasons for their problems and to figure out what can be done about them.

C. Some Do's and Don't's of Listening

1. In listening we should try *to do* the following

   a. Show interest
   b. Be understanding of the other person
   c. Express empathy
   d. Single out the problem if there is one
   e. Listen for causes to the problem
   f. Help the speaker associate the problem with the cause
   g. Encourage the speaker to develop competence and motivation to solve their own problems
   h. Cultivate the ability to be silent when silence is needed. Successful people usually know how to remain silent and keep their counsel. Some executives smoke cigarettes so as to be sure they keep their mouth shut, other individuals given to talking often in meetings with others, prop against their water-glass a little card on which they have printed "Keep Quiet."

2. In listening, *don't do* the following

   a. Argue
   b. Interrupt
   c. Pass judgment too quickly or in advance
   d. Give advice unless it's requested
   e. Jump to conclusions
   f. Let the speaker's sentiments react too directly on your own

D. The Great Complexity of Problems Involving People and Situations and the Urgent Need for Listening to Understand Them.

1. We think we *understand people* and all the difficulties involved when frequently we don't even listen intently to them.

2. We think we *understand a situation* when we see only part of the situation and experience even less of it.

3. We think we *understand the problems people face* when we may have only a surface acquaintance with their elements and relevance, and in actuality we may be dealing merely with symptoms and not causes.

4. We should realize that *listening* is a *key* to *knowing* and *understanding*.

   a. One way *to know more* is *to listen more* and to get more information.
   b. A person's judgments and decisions are only as good as the information upon which they are based.
   c. We need to discard the *allness* orientation, namely that we know or have *all* the answers. We can never know all about anything.
   d. We need to approach people and their problems with greater humility and recognition of the complexities involved.
   e. We need to *listen* with greater *intensity*.
   f. We need to *observe* with greater *acuity*.
   g. We need to *react* to other people with greater *empathy*.
   h. We need to *synthesize* what they say, think, and feel with greater *understanding*.

5. *Recognizing* the *difficulty* and *complexity* of people, situations and problems enables us to become better listeners.

   a. We can listen not just for words and sounds but for what lies behind them.
   b. We can listen for facts, meanings, and reactions.
   c. We can listen for feelings, sentiments, and emotions.
   d. We can seek to distinguish between an actual event and people's interpretations of that event.
   e. We can be aware of overtones, what they mean and convey as well as the meaning and relevance of undertones. For example, we can listen in terms of whether the speaker is conveying pessimism versus enthusiasm in terms of what they are saying, or whether they really have a positive versus negative approach in terms of what they propose to do.
   f. We can be aware of the signal reaction--responding automatically in terms of previous thought and habit patterns.
   g. We can remember in understanding people and their problems that words are only *symbols* for things but they are not the things themselves. Words do not mean--people mean. The meaning is not in the words, it is in what the person means when they use the words. Indeed, for the 500 most commonly used words in the English language that appear in the Oxford Dictionary there are over 14,070 different meanings or an average of 28 separate meanings per word. What people mean is not necessarily conveyed solely by the words put in many other subtle ways. As the old Arab adages goes--Listen to what people *say*, but find out how they *feel*.
   h. We should remember that we listen to people, their words and meaning, through a baffle or screen made up of our own attitudes, values, beliefs, and preconceived notions and judgments. Thus, in listening to others, we tend to add something to what they say in terms of what we think, feel, and believe. We must try to minimize this.

E. Specific Listening Techniques

In the table that follows, there are set forth some of the key listening techniques, the purpose of each, and how each can be used. These are guides for the coach to use in listening and communicating with their subordinates. In each case, understanding of them is intellectually quite easy but the real problem is in using them effectively in our relationships with other people. This requires practice, and practice requires repetition and patience.

	TYPES	PURPOSE	EXAMPLES
1.	CLARIFYING	1. To get at additional facts 2. To help them explore all sides of a problem.	1. Can you clarify this? 2 Do you mean this. . .? 3. Is this the problem as you see it now?
2.	RESTATEMENT	1. To check our meaning and interpretation with theirs. 2. To show you are listening and that you understand what they are saying. 3. To encourage them to analyze other aspects of matter being considered and to discuss it with you.	1. As I understand it then your plan is. . . 2. This is what you have decided to do and the reasons are . . .
3.	NEUTRAL	1. To convey that you are interested and listening. 2. To encourage person to continue talking	1. I see 2. Uh-huh 3. That's very interesting 4. I understand
4.	REFLECTIVE	1. To show that you understand how they feel about what they are saying. 2. To help person to evaluate and temper their own feelings as expressed by someone else.	1. You feel that . . . 2. It was a shocking thing as you saw it. 3. You felt you didn't get a fair shake.
5.	SUMMARIZING	1. To bring all the discussion into focus in terms of a summary. 2. To serve as a springboard for further discussion on a new aspect or problem.	1. These are the key ideas you expressed . . . 2. If I understand how you feel about the situation. . .

Taken from the materials of the Management Development Laboratory presented by the Department of Mental Health Division of Personnel Service, in cooperation with the Industrial Relations Center, the University of Chicago. WVSC, U.W. Madison

RESOURCE K

The Communication of Empathy

In our work, our leisure activities, and our social life, we are relating to other people to a greater or lesser degree of emotional intensity and involvement. The following suggestions were designed originally for a counselors' use in a helping relationship with their clients. Nonetheless, you as classroom teachers are relating daily to students whose views, perceptions, value systems and priorities are different from your own. Your primary goal is to impart to them a working knowledge of your particular field of expertise as embodied in any given course that you teach. You are not attempting therapy with your students, but if you can sharpen your skills of emphathetic perception and empathetic expression, you will probably find that you achieve your primary goal--education--more efficiently and more effectively.

Guidelines for implementing empathy:

1. Concentrate with intensity upon the other person's expressions, both verbal and non-verbal. You are, I'm sure, quite aware of the classic non-verbal signs of boredom and disinterest that students can manifest in the classroom, but students often express these and other feelings (anxiety, fear, anger) in subtle ways before they reach the point of where how they feel is quite obvious to all.

2. Strive for simple interchangeability with the other person's communication in initial interactions. By making responses which are interchangeable with (restatements of) the other person's responses, you can test the accuracy of your perceptions and also lay the groundwork of trust, of feeling understood.

3. Couch responses in the language of the other, or in language understandable by the other. Use of a language that reflects the other's frame of reference provides the other person with the experience of being understood. Feeling understood is an important foundation for the emergence of a rapport with the other.

4. Communicate responses in a feeling tone similar to that of the other when appropriate, but express your awareness of the other person's feelings in any case. In this way, the other becomes aware of being "heard" at a feeling level. When appropriate, you may even express a wider range of feelings than the other, and express them more intensely than the other person. In this manner, you can help the other person to experience and express feelings that may have been out of awareness or denied.

5. Be responsive. Responsiveness provides a model for an active approach to problems and also increases the probability of accuracy in communication. The more frequently you respond, the less likely you are to deviate from perceiving with accuracy the way the other person experiences the world, and the more likely you are to become aware of it if your perceptions are deviating. This doesn't deny the necessity for the use of silence or relative inactivity when appropriate.

6. Concentrate also on what is *not* being expressed by the other person. The unexpressed side of the other's experience must be developed if the other person is to experience himself as a whole. The deepest level of empathy, then, involves filling in what is missing rather than simply dealing with what is present.

7. Use the other person's behavior as a measure of the effectiveness of one's own responses. If a good communication base is created before one moves to deeper level empathetic responses, the other will most likely shift to deeper levels also rather than resisting such a shift. In fact, the other person may become intensely and accurately attuned to your verbal and non-verbal expressions as well as your being attuned to theirs.

RESOURCE L

Causes for Poor Communication

A. Reasons why people cannot effectively communicate verbally:

1. Lack of skills
   a. Inability to give a clear message
   b. Inability to hear accurately
   c. inadequate vocabulary
   d. Cultural deprivation

2. Inhibited by fear or strong anxieties

3. Strong feelings of hostility

4. Thinking and/or feelings not clarified or understood

B. Reasons why people <u>will not</u> effectively communicate verbally:

1. Fear
   a. Might be "put down"
   b. Might be ridiculed
   c. Might be outreasoned
   d. Might have to change (need status quo)
   e. Lack of knowledge might be exposed
   f. Might expose selfishness or manipulations
   g. Might be penalized or hurt
   h. Might lose something or have to compromise
   i. Might expose the real self

2. Anger or hostility
   a. Isolation--a way to punish the other person
   b. Fear of showing extent of anger

3. Over-concern
   a. Too anxious and concerned to express ideas well

4. Indifference
   a. Lack of concern, care, or love
   b. Don't want to get involved

5. Control
   a. Poor communication a defense
   b. Manipulation often requires poor communication
   c. Refuse to hear the other person

6. Self-concept

7. Don't want to solve problems

Resources K and L excerpted from "Effective Communication" by Mary I. O'Sullivan, Consultant, Adult and Continuing Education, 1983 DVI Summer Training.

RESOURCE M

Ways to be a More Effective Communicator

There are three important ingredients of successful communication:

RAPPORT - Create a positive "climate" for your communication. Try to develop a relationship built on trust and respect. Express your message in an open and honest way.

EMPATHY - Seek better understanding by trying to see the other person's point of view. Look for the feelings, thoughts and motives behind the sender's communication.

PLANNING - Make the following decisions before you communicate with your message:

- What should be communicated to whom?
- When is the best time?
- Where is the best place?
- What is the best method?

Think carefully what you want to say and how you want to say it. Accept the personal challenge of communications. Develop an awareness of its need and importance in our lives. Make a conscious effort to practice it daily.

Taken from Donald L. Kirkpatrick, No-Nonsence Communication

SECTION TWO: ADMINISTRATIVE SUPPORT

ADMINISTRATIVE SUPPORT

The 1981-82 DVI pilot summary report identified administrative support as the most important factor in the success of the DVI approach. This section of the Handbook will consider methods for gaining administrative support and the results of administrative support. Evaluation of the effectiveness of various attempts to gain administrative support and resources are also provided in this section.

Techniques for Gaining Administrative Support

The following techniques have been reported to be effective in developing administrative support.

- Discuss with the administration that their support is the most important variable of impact on program acceptance and implementation.
- Jointly develop goals and implementation strategy and clearly define the administrators' observable role as part of the implementation process.
- If problems or issues develop where the support of administration is necessary, the DVI should follow the appropriate procedures and recognize the chain of command.
- Identify the administrator who is the key for gaining support and issue resolution.
- As the DVI follows the chain of command other, people who are involved should be kept informed of the activities.
- Keep the administration informed concerning activities and time lines using either informal or formal methods. See Resource A for a sample of a formal reporting method.

- When discussing a problem or issue with an administrator, always try to offer solutions.
- Help administrators in their efforts for good public relations. Be willing to speak to service organizations, parent groups, etc.
- Inservice activities should be planned with the appropriate administrators. Invitations or notification of the meetings should be issued jointly.
- If invitation or notification of meetings is issued by an administrator, the administrator should be asked to present an introduction or in some way be a participant.
- Often, informal methods of communication can result in the greatest inroads toward administrative support.
- Meet deadlines and follow the agreed upon timelines.
- Recognize support and show appreciation with a letter of appreciation or thank you note.
- Use the assigned DVI time for DVI purposes.

Results of Administrative Support

DVI's have reported the following results of gaining administrative support:

- Administrators will develop an awareness of the necessity of vocational education for the students who have EEN and the need for the DVI approach.
- Administrators will have an understanding of the DVI role and have realistic expectations for the DVI program.
- Administrators will contribute to the development of the DVI goals and implementation plan.
- Administrators will give the DVI the reallocated time needed for the implementation of the DVI approach.
- Administrators will insure that resources supporting the program are spent in a manner which enhances the vocational education for EEN students.
- Administrators will allow the DVI to attend conferences and workshops that relate to vocational education of EEN students.
- Administrators will attend meetings throughout the year to keep up-to-date on the DVI program.
- Administrators will provide input into the evaluation process and will participate in the evaluation of the program.

Evaluation of Effectiveness

Administrative support can enhance the implementation and continuation of the DVI approach. It is difficult to statistically determine levels of administrative support. Surveys such as those used by the DPI in the end of the year evaluation can be used to give the DVI an indication of support. See Resource B.

Some Helpful Hints

1. Thank you notes
2. Give credit for work completed
3. Keep informed
4. Get things done on time (keep time line)
5. Use DVI time as DVI time
6. Knowledge of social events
7. Press P.R.
8. Handle your own problems
9. Don't go to him/her with every little thing

RESOURCE A

Sample Form for Reporting Activities

School: _____

Program: _____

Week of: _____

DATE	STAFF PERSON VISITED, COORDINATION ACTIVITY or WORK DONE	TIME (tenths or fractions of hr.)	STUDENT WORKED WITH TIME
MON			
TUE			
WED			
THUR			
FRI			
SAT			
SUN			

Complete the report weekly and send one copy to the Building Principal and one copy to the LVEC.

_____
Coordinator's Signature

RESOURCE B

Administrative Questionnaire

Your current job title _____

School Name _____

Address _____

DVI's name _____

1. What steps did you take to help implement the DVI approach in your school?:

   a) Before the start of the school year?

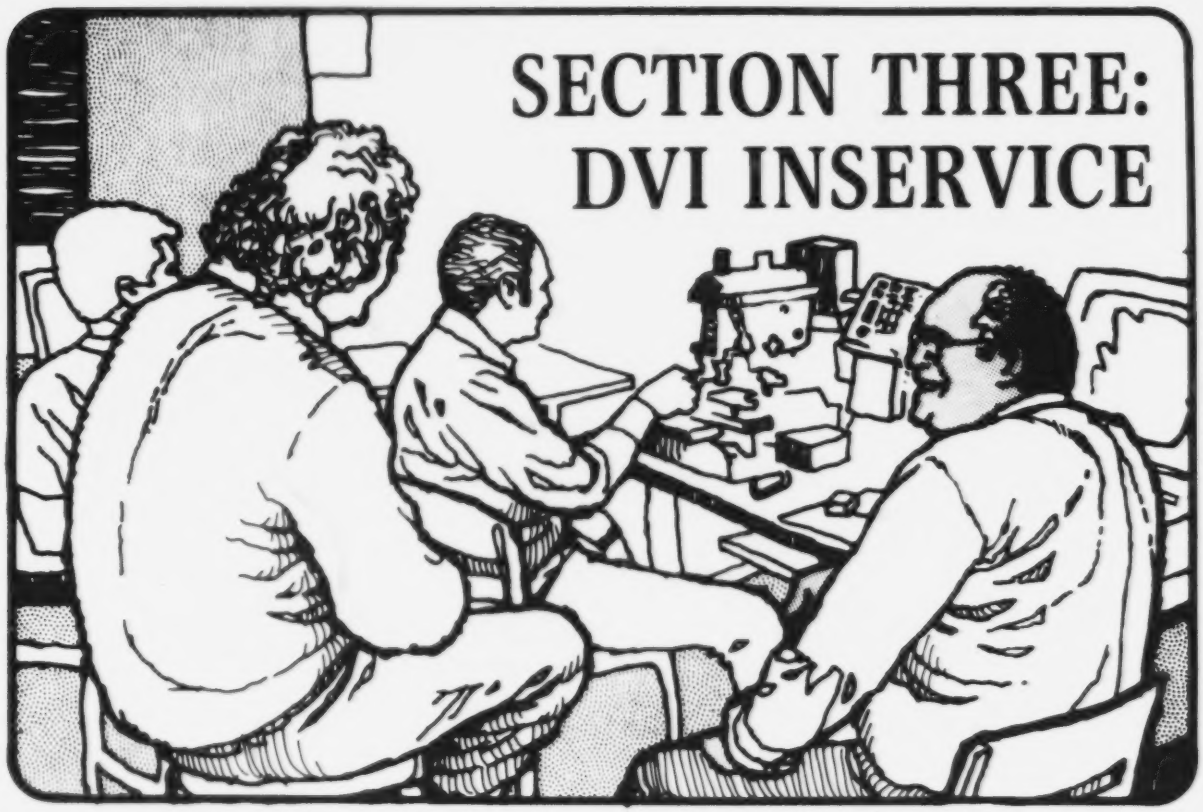
   b) At the beginning of the school year?

   c) As the year progressed?

2. What are the strengths and weaknesses of the DVI approach as it was applied in your school during the current school year?

3. What plans does your school have regarding the DVI approach for the following school year?

4. Other Comments:



SECTION THREE: DVI INSERVICE

INSERVICE

An inservice can be used to address a variety of needs when implementing school-based change. Inservice has the potential to provide participants with needed information, to identify problems, and to determine strategies for goal attainment. An inservice can also reinforce participants' skills and/or involvement in implementing the DVI process. Finally, it provides an opportunity for participants to interact in an environment outside of the structured school day and with staff outside their discipline.

Inservice Process Model

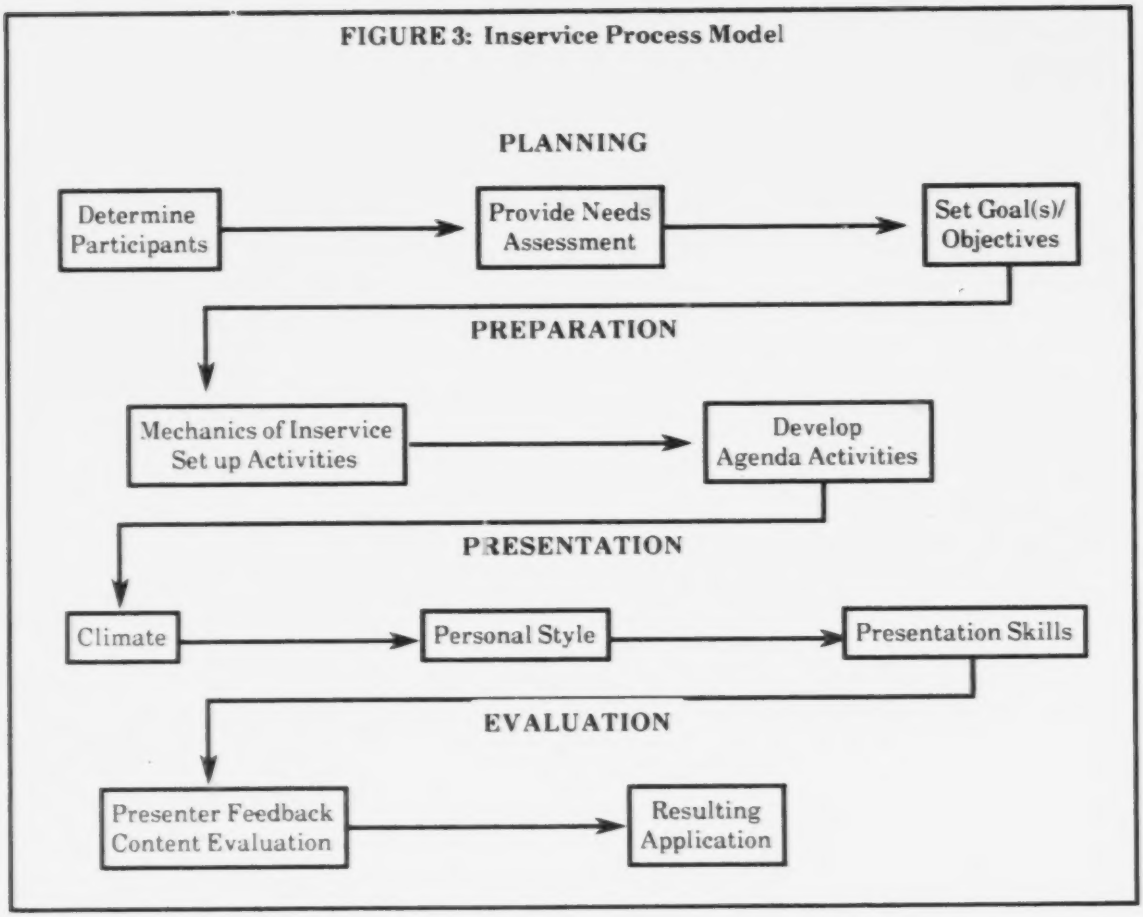
This section of the Handbook will introduce the DVI to basic knowledge of the development and/or facilitation of inservicing. There are four major stages that can be used by the DVI for facilitating effective and affective inservicing. These are: 1) planning, 2) preparation, 3) presentation, and 4) evaluation. The Inservice Process Model, Figure 3, illustrates these stages.

The four stages of inservicing identified in the model will be looked at in greater detail.

A. Planning

Planning is an important element in implementing an inservice activity. It ensures that goals and objectives are consistent with the needs identified. There are four steps in planning an inservice. These include determining participation, providing needs assessment, setting goals/objectives, and developing agenda activities. Each of these will be considered in turn.

FIGURE 3: Inservice Process Model



1. Determining Participants

The first step for the planning of an inservice. One or any combination of the following personnel might be included:

Special education teachers
Vocational education teachers
Guidance staff
Administrators/Supervisors
Other - parents, related agencies, VTAE, etc.

Who is included is obviously determined by the purpose of the inservice activity.

2. Providing a Needs Assessment

The next step in planning is to do a needs assessment. This is a tool for identifying inservice content through the assessment of attitudes and awareness levels of potential participants. This allows for participant involvement in determining inservice content, and results in goals that are parallel with participant needs.

A needs assessment can be accomplished utilizing a formal written survey (Resources A & B). It may also be provided informally through interviewing potential participants or observing in the vocational education

classroom. Finally, a needs assessment can be a component of an in-service itself. In this case, participants are frequently asked to identify needs through a brainstorming activity.

3. Setting Goals and Objectives

The identification of goals should be consistent with needs identified. When developing goals and objectives, the DVI should be realistic regarding what can be accomplished through a specific inservice. (Resource C)

4. Developing Agenda Activities

The final step in planning requires creativity on the part of the DVI. A good agenda includes activities that meet inservice objectives in the most interesting way possible. (Resources D and E) Detailed areas of need and examples of agendas used by DVI's are located further on in this section.

B. Preparation

Preparation is the key to presentation success. This is the stage where the actual mechanics and set up of the inservice are performed. Activities might involve the following:

1. Mechanics

Activities under this heading include the following items:

- Setting date and time
- Making arrangements for location of inservice
- Contacting potential speakers
- Inviting participants (Resources F & G)
- Collecting equipment needed

2. Set Up

In actually setting up your inservice activity the DVI should:

- Collect equipment needed
- Prepare handouts
- Prepare audiovisual aids
- Rehearse
- Set up room

3. Helpful Hints

In preparing for the inservice, it might be helpful to keep the following ideas in mind:

- When combining staff from different department for inservicing, pick a "neutral setting." This site might be a local restaurant or meeting center.

- When selecting a speaker, consider the speaker's skill in presenting materials, base of information, and audience rapport. Keeping this in mind, the DVI may wish to utilize other resources including other DVIs, DPI personnel, and/or local school staff.

- When attendance is not required, incentives to promote attendance could include stipends, local in-service credit, release time, a dinner, or a system for personal recognition.

- When the inservice involves additional expenses, the DVI should consult with the administration to determine funding sources.

- When considering time allotment for activities, review agendas in the resource section.

- A cooperative effort in planning and preparing an inservice can provide a support network. The DVI along with the LVEC, special education director, the principal, and/or staff member with inservice experience would make an effective team.

- The inclusion of administration in the inservice is important for the continued support of a program. Not only does this keep administrators abreast of the DVI program, but also is perceived by participants as administrative support.

- When preparing an inservice for adults, the DVI must remember that adult learning style calls for a presentation different from the classroom. This methodology is documented in *New Direction for Continuing Education, Teaching Adults Effectively*, Jossey-Bass Inc., 1980, and *Learning How to Learn, Applied Theory for Adults*, Follet Publishing Co., 1982.

C. Presentation

The presentation is the culmination of the planning and preparation stages of inservicing. If you will be presenting material at the inservice, the following techniques might be useful.

1. Climate Setting

The first few minutes of a session are the most crucial. This time is the opportunity to get the audience in tune with the objectives. The following are suggestions for creating a climate which will be both satisfying and productive:

- Start on time--participants expect it.
- Describe objectives for the session and provide a sense of how the time together will be managed.
- The listeners will also need to know whether note taking is recommended.
- Let attendees know when rest and stretch breaks are planned.
- If small-group activities with relatively permanent groups will be used, form those groups early and give participants an opportunity to chat among themselves. A group size of five seems adequate for balanced discussion and maximum output.
- Let participants know how questions will be handled. Some presenters or facilitators hold questions until the end to maintain the momentum of the session. Others prefer that attendees ask questions as they occur. Whichever procedure is chosen, let participants know early in the session.

2. Personal Style

The personal style of a presenter can make the difference between a successful or unsuccessful inservice. A good rapport between the presenter and the audience is productive to learning. The following are suggestions for projecting a positive personal style. (Resources H and I)

- Avoid cliches, jargon, and "buzzwords."
- Watch out for distractions like jingling pocket change or material on a flip chart or screen unrelated to the topic being discussed.
- Don't take yourself too seriously. If you acknowledge humanness, attendees will be inclined to do likewise.
- Maintain eye contact with the audience in all sections of the room.
- Call two-minute breaks whenever it is sensed they are needed.
- Once a point has been adequately covered, summarize it and move quickly on. Frequently restate essential points to reinforce the continuity of the presentation design.
- Use pauses to let an important point sink in or to encourage audience reaction.
- Avoid distracting body language such as shifting weight from one foot to another or constantly folding and unfolding arms.

- Never make excuses for elements missing from the session. Excuses call unnecessary attention to imperfections.

- Find ways to use natural humor or anecdotes to illustrate important points.

- Be especially sensitive to avoid either stories or language which might be offensive to any member of the audience. Sexist references or comments which "put down" any individual or group can only result in harm to your own effectiveness and acceptance as a speaker.

- Most important . . . be yourself!

3. Presentation Skills

Asking questions is one of the best ways to engage an audience, secure their participation, and maintain communication. Questions help stimulate thinking, steer discussion, and sidetrack irrelevant discussions. Questions can be looked at from two perspectives—how to generate questions and how to respond to them.

a. **Generating questions** from the audience can be done in several ways. The most traditional way is to pause and say, "What are your questions?" This is often the least useful way, because it allows people who are more gregarious and experienced to be the first to raise their hands. It often brings out people who have their own speech to make. It also inhibits those who may have very serious questions but who may not wish to speak before a large group.

An alternative is the small group strategy. Place people directly into small groups and ask them to identify questions and then select the one which they think is most appropriate. A variation is to ask people to discuss possible questions with a person sitting next to them.

Another way to receive and screen questions is to ask people to write them on 3 x 5 index cards and pass them forward for response.

Never plant questions. A planted question is easy to spot and causes the audience to feel manipulated. If you have some thing to say, say it!

b. **Responding to questions** also calls for skill on the part of a presenter. Some points to consider are:

- Honor each question with an answer which is direct and to the point. Take a position and support it with specifics.

- Divide any complicated questions into understandable parts and deal with each in order.

- Recognize each questioner with precision by pointing to or describing the person asking the question. Recognize several questioners simultaneously by telling them what order they will be taken--who will be first, second, third, etc.

- Quickly defer irrelevant questions--those that have nothing to do with the topic at hand. But do it pleasantly ("let's talk about that during break") and then move on to the next question.

- If faced with a statement rather than a question, just turn it around to a question and answer it briefly.

- Be sure to recognize questions from all parts of the room, moving from section to section and back again.

- Never belittle any question or answer a question with another question.

- If caught at a complete loss to answer a question, do not bluff it! If it is outside your specialty, simply tell the questioner you don't have the answer. Offer opinions, ask if someone else in the audience has the answer, or offer to research it and respond later.

4. Concluding

Conclude on time--be sensitive to other sessions. End the session on a high point. A poem, story, startling statement, or quotation works well. It is important that closure is provided for the audience. A part of the closing remarks should include an expression of appreciation to the resource people and the audience for their attention. Remind the audience to complete the evaluation forms for feedback when planning future conferences.

The resource used for the content information on presentation was A Presenter's Guide to Conferences by Bell and Margolis, 1980, American Society for Training and Development.

D. Evaluation

The purpose of an evaluation is to look at information, plan for the future, and measure "if and to what extent" goals and objectives of the inservice have been met. Inservice evaluation is determined on the basis of participant feedback. Feedback information is received in the form of narrative, multiple choice, or checklist. The preferred format is to have participants respond in narrative. Evidence has shown narrative feedback provides more precise information to use in planning. (Resource J) It is important to consider time allotted for feedback response. In situations with limited time, a short response form may be more appropriate. (Resource K)

Inservice feedback activities should follow immediately at the close of the inservice. This information should be compiled and returned to the participants within a five-day period.

The DVI should use both short term and long term evaluative approaches since each has a different purpose. Short-term evaluation gives information regarding how effective a speaker was in presenting material. A speaker can also do a self-rating. (See Resource L) Another short-term evaluation goal is content evaluation. This determines if the goals and objectives were met through the inservice methods and materials. Long-term evaluation has as its purpose the determination of whether or not the inservice experience actually changes the behavior of others. Long-term evaluation measures concepts which are put into practice as a result of an inservice. Feedback information is used as a basis for needs assessment for future inservicing.

Suggested Agenda Activities

An inservice related to implementing the DVI model can address a variety of needs. Areas of need and example of methods used by DVI's in inservicing include the following:

- **Awareness**. Many DVIs have used an inservice at the onset of program implementation to familiarize staff with how to use the DVI model in the local district. Depending on school size, this can be done with each discipline separately or with all staffs together. Some DVI's have scheduled this inservice during the days prior to school starting while others have planned three and four hour sessions after school which may or may not include a dinner. (Resource M)

Another example of an inservice that dealt with awareness was one in which lack of knowledge about the other disciplines was a concern. A hands-on inservice in which vocational staff and special education staff were actively involved in providing

simulations in their area of expertise was implemented.

- **Problem Identification**. The inservice that includes the identification of problems/barriers as an activity is basically performing a needs assessment. An example is having participants break into small groups and brainstorm about problems or barriers to implementing the model. This provides a basis for future inservice needs. (Resource N)

- **Problem Resolution**. This is a critical need once problems have been defined. An inservice can insure a cooperative effort at looking at solutions to the problems that exist. In one school district, lack of communication was identified as a need. To assist in developing strategies for the solution of this problem, the participants were asked to define their role responsibility. They were then asked to share this information with the other participants. (Resource O)

  A second problem identified was the need for joint involvement in the development of an IEP. To assist in clarifying the roles, the participants were asked to define their responsibility in developing the vocational component in the IEP.

- **Reassurance/Reinforcement**. Not only does reinforcement through inservice acknowledge participants past and present efforts, but it also generates enthusiasm for the program. In one district inservice was used at the end of the school year to wrap things up. The agenda included "testimonials" from vocational and special education staff members as well as a reaffirmation of support from administration and DPI officials.

Evaluation of Effectiveness

A well-planned inservice should be recognized as a valuable tool in promoting the changes needed to implement the DVI model. It can be used to inform, to identify problems, to develop solutions, and to reinforce staff participation. It can also inherently promote better inter-disciplinary interaction. As an example, an inservice designed to promote an awareness of the DVI model to staff and administration can promote inter-disciplinary communication and cooperation as well. When an inservice is conducted in a socially pleasant environment and when the agenda allows for socialization to occur, participants become more comfortable with each other. Through inservice evaluations it was found that participants felt socialization was a valuable element of the inservice. Comments such as: "Great to meet other staff!" or "Nice to have the opportunity to share concerns" further suggest that the incidental gain in inter-disciplinary communication is a strength of inservicing.

The effectiveness of an inservice is measured by the extent to which the inservice goals and objectives have been met. Evaluations from past DVI inservices document that individual and group inservice is an invaluable strategy for eliciting change.

RESOURCE A

Inservice Pre-Survey

TO:

FROM: Inservice Facilitator - DVI

RE: Pre-Survey Information

Attached is a form to be filled out and to be used by the Inservice that will be held Wednesday, _____.

Please indicate your Job Position i.e., exceptional education teacher or vocational education teacher, other and respond to the statements below. This information will help provide effective learning activities.

When completed, place the pre-inservice survey in my mail box by _____.
Thank you for your cooperation. I am looking forward to working with you.

Please respond to the following statements by circling the number that best represents your awareness for participating in an Individualized Education Plan/Program.

3 = Strong 2 = Average 1 = Little

1.	Awareness of the needs, characteristics and capabilities of exceptional education needs students LD, ED, MR, PHH, and SPL.	3	2	1
2.	Awareness of an Individual Education Plan (IEP) for an exceptional education need student.	3	2	1
3.	Awareness of an Individual Education Plan (IEP) for exceptional education students who are mainstreamed into vocational areas.	3	2	1
4.	Awareness of responsibility for developing an IEP with vocational objectives.	3	2	1
5.	Awareness of how and why vocational education curriculum is modified to meet the needs of a student's handicapping conditions.	3	2	1
6.	Awareness of how exceptional education students are assessed and scheduled into classes that will provide skills or participation in the world of work.	3	2	1
7.	Awareness of community job needs in order to assist students with vocational planning/ opportunities.	3	2	1

RESOURCE B

What Do You Want the DVI To Do For You?

Please prioritize, according to your specific classroom needs, the following activities of the DVI:

_____ Orally read tests to EEN students

_____ Tape record your textbook concerning content materials

_____ Provide additional instruction on how to use various measuring tools

_____ Highlight technical vocabulary found within your texts

_____ Provide follow-up monitoring of EEN students enrolled in your vocational classes

_____ Involve you in writing IEP objectives

_____ Assist students in answering the questions within your textbooks

_____ Provide you with vocational assessment results of the EEN student within your classroom

_____ Provide individual instruction to EEN students concerning shop safety rules and regulations

_____ Other (please specify)

_____

(your name) (department)

RESOURCE C

Inservice Planning Form

SCHOOL: _____

SPECIFIC GOAL: _____

OBJECTIVES: _____

_____

Specific Activities	Participant	Materials/Equipment	Time Line

_____

Evaluation (Plan for the future and measure improvement)

_____

RESOURCE D

What Research Has Shown About Inservice Training

As you plan and prepare your inservice program, you may wish to incorporate strategies which have proven effective on many occasions (Journal of Teacher Education, 1979, p. 28).

1. Locally developed program in which participants helped plan inservice activities were successful more often than programs planned and conducted without their assistance.

2. Programs in which participants engaged in self-instruction by using prepared materials, objectives, and planned guidance were usually successful.

3. Inservice programs that had different training experiences for different participants were successful more often than programs that had common activities for all.

4. Inservice programs that required the participant to construct and generate ideas, materials, and behaviors were more frequently successful than programs in which an audience accepted ideas and behaviors from the instructional agent.

5. Programs that emphasized demonstration, supervised practice, and feedback were successful more often than programs in which those attending were expected to apply concepts and skills on their own after the conference.

6. Programs in which participants shared ideas and provided assistance to each other were more frequently successful than programs in which they did not.

7. Participants were more likely to benefit from inservice programs that were part of a long-term systematic staff development plan than they were from "single-shot" short-term programs.

8. Participants were more likely to benefit from programs in which they chose their own goals and activities than from programs in which goals and activities were pre-planned.

*Vocational Studies Center, University of Wisconsin--Madison

RESOURCE E

Methods for Presentation of Topics

METHOD	DEFINITION	WHEN USED	PREPARATION/ PROCEDURES	LIMITATION
Audiovisual Aids	A means of information giving	Systematic presentation of knowledge. Should be used with other methods.	Aid must relate to the topic. Preview of materials used is necessary. Should be followed by group reaction.	Location of effective facilities and equipment.
Blackouts	A rapid succession of 4 or 5 brief role play scenes depicting various methods of handling certain problems. Some type of curtain is used before and after each scene.	An interesting way to present a number of solutions to a problem in a series of brief scenes to stimulate group discussion.	The leader and planning group work out a number of ways to handle certain problems presented by the group. The method used is written down by each member as the scene occurs. The blackout scenes are presented in a series before the group is allowed to take part in the discussion. A curtain is held by 2 group members who lower and raise it at the proper times. The group members tell what methods were used in the scenes after the blackouts. These may be written on the blackboard. Then each solution is discussed and evaluated by the group.	The topic and the methods to be used in the blackout scene need to be well defined.

METHOD	DEFINITION	WHEN USED	PREPARATION/ PROCEDURES	LIMITATION
Brainstorming	Technique where members of a group list ideas to solve a problem during an allotment of time	To get new ideas, and release individual potentialities in thinking up ideas.	Leader and member of planning group select suitable problems or questions on the topic selected by the entire group. Procedure: The leader explains to the group the meaning of brainstorming and the following rules: Critical judgments ruled out. Quantity of ideas wanted. The more ideas the better chance of good ones. Free wheeling welcomed. The wilder the idea the better; it's easier to tame them down than to pump them up. Hitchhiking is legitimate. If you can improve on someone else's idea, so much better. Leader rings bell when one of the above rules is violated. Recorder lists the ideas. Follow-up: type list and bring to next meeting to give to members.	To be utilized as only a part of the meeting.
Buzz Groups	Allows for total participation by group members through small clusters of participants followed by discussion of the entire group.	As a technique to get participation from every individual in the group. Highly adaptable to other group methods	Prepare 1 or 2 questions on the subject to give each group. Divide members into small clusters of 4-6. A leader is chosen to record and report pertinent ideas discussed.	Give thought as to the purpose and organization of groups.

METHOD	DEFINITION	WHEN USED	PREPARATION/ PROCEDURES	LIMITATION
Concentric	A small circle of group members within a larger circle. The inner circle discusses topic while the role of the outside circle is to listen. The discussion is then reversed.	As a technique to stimulate interest and to provoke good discussion. This is especially good to get more response from a group that is slow in participating.	Leader and planning group work out questions that will be discussed by the concentric circle and then by the larger circle.	Much thought and preparation must be given to the questions for discussion Rooms of size and shape for chairs to be arranged in a circle.
Demonstration	Activity in which participants observe planned, carefully presented examples of real or simulated behavior illustrating certain techniques, materials, equipment, and procedures as they might be realistically used.	To inform participants of materials, equipment, skills, procedures; to develop understanding about time and space relationships between elements demonstrated; to stimulate interest in use of the techniques, materials, procedures being demonstrated. Good technique for those newer to their profession.	Define the focus of the demonstration; select person(s) to demonstrate; plan the demonstration itself; arrange for observers to view effectively and conduct follow-up activities, i.e. discussion, laboratory sessions, directed practice interview for planning ways of using demonstration. Group size 30-100 depending on demonstrated activity. Need good lighting, acoustics, and viewing. Demonstrations by peer better accepted.	Does not develop skills. Observers who know what is to be demonstrated will not gain much; something new or different must be offered.
Discussion with a Consultant	An open discussion in which the consultant sits in as a member of the group.	When authority is needed to help clarify the thinking of the group after he group has explored the problem and determined the areas in which it needs further help.	Select someone who is well-qualified in the particular subject which is to be discussed and who understand group participation.	Availability of a quality consultant.

METHOD	DEFINITION	WHEN USED	PREPARATION/ PROCEDURES	LIMITATION
Discussion Debate	A pro and con discussion of a controversial issue. Objective is to convince the audience rather than display skill in attacking the opponent.	In discussion a controversial issue on which there are fairly definite opinions in the group on both sides to bring these differences out into the open in a friendly manner.	Divide the group into sides of pro and con. Each speaker s should be limited to a predetermined time followed by rebuttal if desired.	Members are often not objective toward the subject.
Discussion Experience	A small or large group discussion following a report on the main point of a book, movie, or life experience.	To present a new point of view or to present issues that will stimulate thought and di cussion.	Plan with other participants how review is to be presented. Then have an open discussion on pertinent issues.	Ability of participating member to relate to others and motivate thinking.
Discussion Group	Opportunity for polling ideas, experience and knowledge.	For majority of meetings because of adaptability for group participation.	Preplanning to develop discussion outline. Leader encourages every member to participate by guiding problem solving. Group size: 7-15	Practical with not more 20 people. Becomes unorganized without planning of materials covered.
Discussion Panel	A discussion in a conversational format with a leader. Audience joins discussion later.	As a technique to stimulate interest and thinking, and to provoke better discussion.	Leader plans with 4-8 panel members. The panel discusses informally without any set speeches. Leader opens discussion to entire group and summarizes.	Can get off beam; personality of panel may overshadow content; vocal speaker can monopolize program.
Discussion	Discussion where topic is broken into various phases. Each part is presented by an expert on that phase, in a brief, concise speech.	When specific information is desired.	Leader meets with 3-4 members of the symposium and plans outline. Participants are introduced and reports given, group directs questions to proper symposium members, leader summarizes.	Can get off beam; personality of panel may overshadow content; vocal speaker can monopolize program.

METHOD	DEFINITION	PREPARATION/ WHEN USED	PROCEDURES	LIMITATION
Field Trips and Observation	Group members make visits and bring information back in group.	Provides group with common experience to discuss, to understand, and to apply theory and knowledge to specific situations.	Experience must be planned to support teaching objectives. Group members must be prepared to consciously look for aspects in this experience. Must be accompanied by discussion to identify concepts, principals, and procedures.	Must have planning and forethought.
Reactors	Individuals that react to discussion or presentation.	To get a critical analysis of a presentation.	Prepare topic, define role, and assign reactor(s). Allow sufficient time for reactor's report and discussion.	Quality person to effectively evaluate and respond to presentation.
Reaction Sheet	A method of reacting to ideas in the following ways: Ideas you question. Ideas that are new to you. Ideas that really "hit home."	A way to get the group to react. Combine with other methods.	Prepare topic and reaction sheets. Explain and distribute reaction sheets with instructions to write as they listen, watch or read. Follow with group discussion.	Topic should be somewhat controversial.
Reverse Thinking	Expression of thought by thinking in reverse.	To gain insight into others' feelings and to see another point of view.	Prepare topic. Explain to group the theory of reverse thinking. Combine with other methods.	A challenge to group members.
Role	The spontaneous acting out of a situation/incident by selected members of group.	As the basis of developing clearer insights into feelings of people and forces in a situation which facilitates or block good human relations.	Choose an appropriate situation or problem. Define roles and general characteristics for each player. Enact the scene. Observe and discuss specific behavior and underlying forces for emotional reactions.	Group leader must be skilled so that actors will play their roles seriously without self-consciousness.

METHOD	DEFINITION	PREPARATION/ WHEN USED	PROCEDURES	LIMITATION
Workshop	A laboratory period in which members of group work on a project.	When active participation and involvement of all group members is desired.	Careful planning with the group is essential in establishing goals. Appoint planning materials members are to bring and sources where these materials may be obtained.	Adequate facilities are needed which will determine the size of the group. Many should be involved in the pre-planning presentation.

RESOURCE F

Designated Vocational Instructor
Spring Inservice

DATE: _____

TIME: _____

PLACE: _____

Inservice credit or stipend offered.

Please return to _____ by _____

_____ I will not be able to attend.

_____ I will be able to attend.

_____ for inservice credit

_____ for stipend

Dinner Choice:

_____ Shrimp

_____ Red Snapper

_____ Steak

Signed: _____

NOTE: The original copy of this invitation was handwritten. You may wish to consider handwritten invitations which may be more personal and less formal.

RESOURCE G

Sample Inservice Invitation

(DATE)

Dear Staff:

We have completed plans for the DVI Inservice at the _____ on _____ at _____. We had sent out a previous memo to notify you of this inservice. We will now need a confirmed reservation from you for the dinner. You will be released early from your building to attend this inservice.

The agenda will be:

4:30	Presentation by _____ DPI Consultant for Vocational Education for Handicapped and _____ DVI, at _____.
5:30	Break
5:45	Dinner
6:30	Film - "A Day in the life of Bonnie Consolo"
6:50	Small group discussions on the needs and problems with handicapped vocational education classes
7:15	Summary of group discussions, evaluation, and closure
7:30	Adjourn

We hope that you will be able to attend this inservice. We must have the confirmed reservations **no later than** _____. These should be returned to your Director of Special Education or Director of Pupil Services.

Sincerely,

(Name)

_____ Yes, I plan to attend the DVI Inservice and dinner on _____ at _____.

_____ No, I do not plan to attend the DVI Inservice and dinner.

RESOURCE H

How to Handle Stage Fright

Pre-presentation nervousness is often grounded in a fear of failure, fear of rejection or just plain fear of the unknown. There are few presenters, facilitators, or adult educators who do not experience occasional twinges of stage fright. Most have grown to expect it, and develop personal strategies for dealing with it when it occurs. Some of these strategies include:

1. Arrive early. A good rule of thump is to be on site one hour before session is scheduled to begin. That way, you can assure yourself that no gremlins have slipped into the room to leave it in disarray after setup. Then, take a walk, practice deep breathing, or any other activities that help reduce internal stress.

2. Greet participants as they come in and chat with them briefly. This strategy can often waylay anxiousness. Some presenters prefer to leave the room and return just before the session begins. Again, it is suggested to do whatever works best for you.

3. Do not memorize. A good presenter is one who presents out of knowledge rather than memory. One stumble might risk it all coming unraveled if you depend on remembering every line or fact. If you must memorize, memorize the opening line! The first five minutes should be thoroughly prepared and comfortable to your style--while nervousness is at its peak.

4. Acknowledge your nervousness. Sometimes stage fright is further increased by trying to hide it. Audiences are generally astute enough to recognize fear when they see it. The chances are quite good that they would have as much stage fright were they in your place. If you acknowledge you're a little bit nervous at the outset, you can devote the energy you're spending to hide nervousness to managing your session effectively.

5. If your legs quiver and you are short of breath, find a place to pause, reach for a cup of water, and take several deep breaths, flexing leg muscles at the same time.

6. Plan a group exercise 7-12 minutes after opening remarks. This strategy enables you to begin with the confidence you will soon have time to relax, increase composure, and review notes while the exercise is in progress.

7. Many presenters find that putting an outline of their session on slides or overhead transparencies enables them to move away from the lectern and be closer to the audience without risk of forgetting an important point or losing their place.

8. Early in the presentation, circulate among the audience if at all possible. By "breaking the physical space" between presenter and audience, you will help build kinship with the attendees - and you'll feel more a part of them as well.

Nervousness can be a friend. It can help sharpen and tune energy to the point you are capable of being most brilliant. The trick is to turn nervous energy from a distractor to a helper. Remember, nervousness is not to be avoided; it is to be rechanneled.

RESOURCE I

Sixteen Strategies for Combating Stage Fright

CHOOSE THE RIGHT TOPIC

Students are usually given a range of topics to choose from. The idea topic is inherently interesting, relevant to both the course and the audience, familiar to the speaker, and supported by adequate and convenient resource materials. Sometimes the hardest task is the first step. Your instructor should be familiar with the area and a good source for suggestions.

OVER PREPARE

Anyone who is unsure of the material would be nervous. The more confidence you have in your preparation the more confidence you will have in yourself. Good notes are central. Most people find total memorization too time consuming and a word-for-word script too artificial and confining. Reminder concepts, printed in large letters with a thick pen, usually make the best preparation. Only you will see them, so you can include stage reminders, such as "pause" or "point to board."

REHEARSE

You may never have heard your projection voice in class; get used to it. The first audience should be yourself, alone. A tape recorder and a mirror may be helpful. Then present to one or a few friends and ask for their reactions. Time your presentation, and use the same voice you will need for the class. Focus on making the phrasing comfortable and conversational; written English uses a different vocabulary, syntax, and sentence length than good spoken English. Also consider enunciation, organization, and speed of delivery. Look for opportunities of injecting color and enthusiasm in your voice and appearance. Finally, discuss the presentation with your instructor to insure that the material is acceptable and perhaps to benefit from additional input. Start early so each draft has time to "settle" as you revise and improve it.

START EFFECTIVELY

The first minutes establish the emotional climate and your "command" of the situation. Specify the topic, clarify why it is of interest or importance, and set a mood of anticipation and relaxation. Try for a touch of humor or drama. Mentioning a few relevant personal experiences would not be out of place, even if it is merely an account of what is was like trying to find the material you are about to relay.

DECLARE YOUR ANXIETY

You start speaking and you feel your mouth getting dry. You see the audience squirming in embarrassment. This raises your anxiety and the worse you sound the more upset you feel. To break this cycle, simply announce at the outset, with good humor, how you feel. Then you will know that if you sound nervous the audience will have expected it, and both of you will be able to deal with it relatively comfortably.

REDIRECT THE FOCUS

If you are not ready for 50 eyes boring into you, lead the gaze away from yourself. You can use handouts, the blackboard, overheads, slides, maps, your own posters, etc. Not only will these visuals take the pressure off of you, they will impress and interest the audience and also give you something to look at.

REDIRECT THE PRESSURE

Look for opportunities to bounce the demands off yourself, toward the audience. Lead up to a question and wait for the answer. Start with a relevant mini-survey. "How many of you have..." Present material and ask someone to respond to it. Given an opinion and ask for a show of hands to indicate agreement or not. Again, such tactics will reduce the pressure on yourself and interest and involve the audience.

DON'T DRY UP

Nervousness causes a variety of physiological symptoms including insomnia, increased heart

rate, stomach aches, moist palms, and a dry mouth. The only symptom that the audience can be aware of is the latter, so bring a drink with you, even a paper cup of water. Professional speakers commonly interrupt their talk for a casual sip.

CHOOSE YOUR STANCE

You will be in command not only of the topic but also of your physical comfort. You may sit on the front desk, stand behind the podium, pace, or remain seated. Do not assume that you are locked into whatever stance you have adopted. Choose whatever is most comfortable and use it in your rehearsals.

ENTERTAIN

Depending on your temperament and the nature of the topic, put some energy and imagination into adding novelty, humor, and theatrical demonstrations. For instance, if you are speaking on alcoholism, bring a tea-filled bottle and take a dramatic drink. Remember, the object is excitement, not panic!

DON'T FEEL AWKWARD

Know that feelings of anxiety, apprehension, and fear are a normal part of going on stage center. Expect your discomfort to wane during the hours and days prior to the beginning moment and to reach a maximum just a few minutes beforehand. You may wish to spend the preceding hour doing something different, rather than dwelling on the presentation. Once you launch your talk, you will probably become quite comfortable.

DON'T BE SELF-CONSCIOUS

All people have some characteristics with which they are pleased and some about which they are sensitive. Under the stress and insecurity of talking in public, people brood about being seen only as a laughably skinny frame, buck teeth, or coke-bottle glasses. Every one in the audience will perceive you differently, and chances are that none of them will be aware of what you deem conspicuous.

PREPARE AN "OUT"

Anxiety can become acute when you are trapped. Once your name is called you are "it" until you finish. Simply rehearse a graceful exit such a, "I'm sorry, but I don't feel comfortable enough to present today; I'll do it another time." Knowing you can escape reduces the worry of being forced to present when unprepared. You may never have to use it, but you have it when you need it.

DON'T PETER OUT

Many people deliver a fine presentation until the final word, which is followed by an awkward pause and a mumbled "Uh, that's it." Try for something more positive than "Thank you, any questions?" Make it clear you are about to summarize or conclude. Give the final words slowly and emphatically, lowering your inflection, especially on the last word.

THINK POSITIVELY

Consider the efficiency of the spoken word. A few pages of sketchy notes can keep you speaking for 15 minutes. A spoken presentation merely has to sound right. Oral presentation should come more naturally than a written paper. Ask for feedback and expect each subsequent presentation to improve. Effective public speaking is a powerful tool that can be learned easily with practice.

*The Personnel and Guidance Journal, October, 1981

RESOURCE J

High School Inservice--Session II

(DATE)
FEEDBACK

1. What did you learn during the inservice?

   a. _____

   _____

   b. _____

   _____

   c. _____

   _____

2. I will be able to apply strategies that were presented at the inservice in the classroom.
   _____ Yes _____ No

   If yes, which

   _____

   _____

3. The inservice program will lead to _____

   _____ for exceptional education students.

4. I would like more inservices presented in this way.
   _____ Yes _____ No

   If yes, would you be willing to work on goals and objectives for the inservice?

   Name: _____

5. I received everything I expected from the inservice.
   _____ Yes _____ No

6. Some of the things I expected from the inservice were:

   Comment: _____

   _____

   _____

RESOURCE K

Inservice on Designated Vocational Instructor Concept

(DATE)

Name: _____

Job Title: _____

School District: _____

Please circle your response using the following scales:

1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

---

1.	Topics and information helped me to understand the DVI concept.	1	2	3	4
2.	I would like more information about the DVI concept.	1	2	3	4
3.	Topics and information made me think about the needs and abilities of exceptional education students.	1	2	3	4
4.	The inservice gave me at least one new idea to take back to my classroom/job. (or) I got more out of this inservice than just a free meal.	1	2	3	4
5.	Length and/or pace of the inservice was about right.	1	2	3	4
6.	Inservice facilities were adequate and convenient.	1	2	3	4

Other Comments:

RESOURCE L

Checklist for Self-Evaluation

_____ Did my participants ask questions?

_____ Did I draw on the participants' experiences to explain points?

_____ Did I draw on my own experiences to explain points?

_____ Did the participants approach me at break time and lunch?

_____ Did the participants discuss class material during breaks?

_____ Was I prepared to teach instead of lecture?

_____ Did I give enough time to the areas I am less familiar with?

_____ Did I reflect questions back to the group?

_____ Did I call on the participants by name?

_____ Did I follow up on non-verbal feedback?

_____ Did I recognize the points the participants had difficulty with?

_____ Did I repeat and rephrase those points?

_____ Did I get personally involve with the content and allow the participants to disagree with me rather than the theories?

_____ Did I deviate unnecessarily from the teaching outline?

_____ Did the discussion go where I wanted to it go, did we get off the topic?

_____ Did I use good teaching techniques--write large enough, step aside so all could see, etc.

_____ Did I use the audiovisual equipment properly?

_____ Did I set limits on private conversations, reading during discussions, and other non-participatory behavior?

_____ Did I admit lack of knowledge and turn to the class for help?

Adapted from: A Blueprint for Trainers. 1980, Multi Resource Centers, Inc., Chicago Ave., Minneapolis, MN 55404.

RESOURCE M

Sample Designated Vocational instruction Inservice Agenda

An inservice meeting for aspecific high school staff will be held on (date) beginning at 4:45 p.m. at the (place).

The objective of the inservice is to introduce you to the Designated Vocational Instructor (DVI) Project. The project will pay you a stipend of $_____ and provide you with supper.

The agenda is as follows:

4:45 p.m.	Registration & Coffee
5:00 p.m.	Rationale, history and overview of DVI Project (name)—Coordinator Vocational/Special Education, Bureau of Vocational Education, DPI
6:00 p.m.	Break for Dinner
7:00 p.m.	group activities (Identify Problem Areas) name Group Leader Business Ed. (4) Agriculture (1) Home Economics (4) Arts (1) Distributive Ed. (1) name Group Leader Industrial Arts (9) name Group Leader Exceptional Education name Group Leader Administration
7:30 p.m.	Large Group to share problems
8:00 p.m.	Pre-Mainstreaming Project Pictorial Overview of Project Relationships Name
8:15 p.m.	Role & Function of Local DVI Name - EEN Instructor & DVI
9:00 p.m.	Adjournment

RESOURCE N

Inservice Agenda
Individual Education Plan (IEPs)

Interdisciplinary Cooperation
between
Special and Vocational Education

Presented to

Vocational-Career Specialty Teachers
and
Special Education Teachers
Date

AGENDA

Introduction:

"Why Me" Role Clarification

"Why Do It This Way?"

We are Part of the Solution:

Attachment #1 Interdisciplinary Cooperation

Attachment #2 Sample IEP Food Service

Attachment #3 Evaluating Students' Progress

IEPs at Your School:

"Where to Begin"

Evaluation:

Attachment #4 Feedback

Summary:

Attachment #5 Recommended: Definite Function of Special & Vocational Education

RESOURCE O

Placement of Exceptional Education Students
Mainstreamed in
Vocational Education Classes

INSERVICE - SESSION I
(DATE)

AGENDA

3:00	I.	Introduction
3:15	II.	Determine Role Responsibility when Mainstreaming Exceptional Education Students
3:45	III.	Develop Responsibilities for Mainstreaming Exceptional Education Students
4:15	IV.	Appropriate Placement of Exceptional Education Students as Defined by Role Responsibilities
4:45	V.	Evaluation of Inservice
5:00		Adjourn

SECTION FOUR: VOCATIONAL ASSESSMENT

VOCATIONAL ASSESSMENT

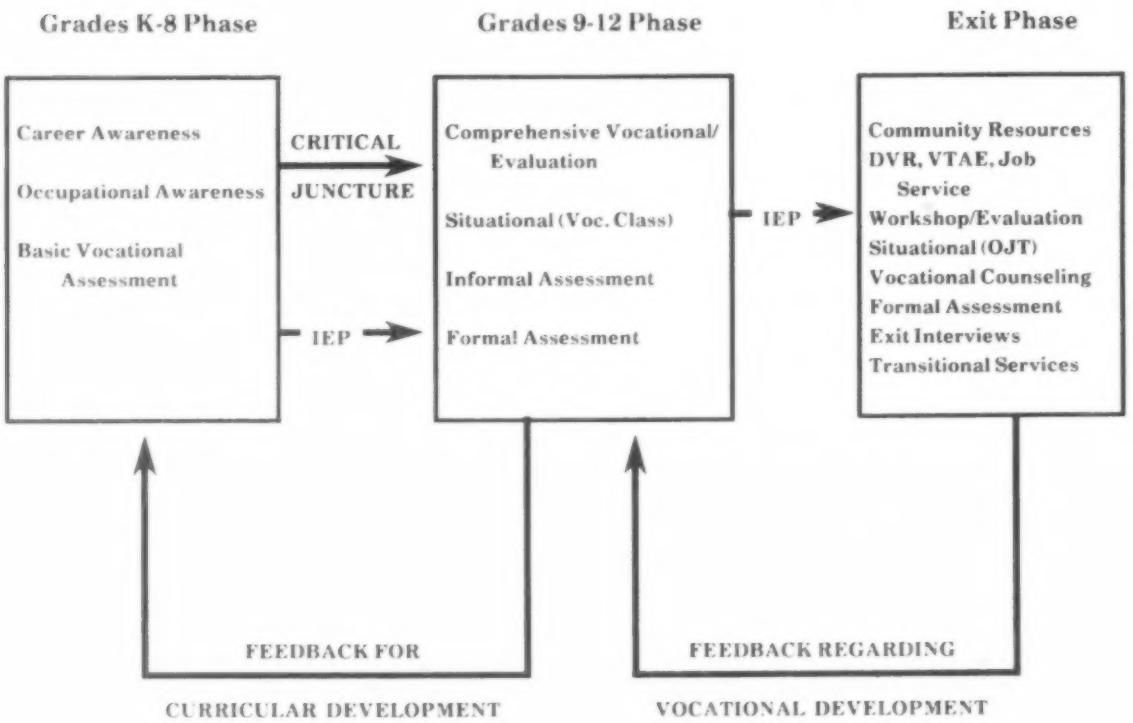
Planning is the most essential element in programming for vocational success. A comprehensive vocational assessment can provide some of the information from which an appropriate plan can be made and carried out. Vocational assessment is specific for each individual and should be done periodically in order to assess progress, determine the validity of predictions, and to accommodate developmental changes and growth.

This section of the Handbook presents a method for implementing an in-school vocational assessment process. In presenting an in-school process the following elements are considered: 1) component and methods of vocational assessment, 2) when to assess, 3) use of results, and 4) DVI role in the assessment process. The resource section includes a discussion of vocationally-related assessment tools.

In-School Vocational Assessment

This Handbook offers the reader a process of vocational assessment that can be carried out in the school setting. There are three phases in the process, each related to a particular period of time. The first phase occurs when the student is in grades kindergarten through eight. The second phase is during the secondary program grades nine through twelve; while the final phase occurs during the time period immediately after the student leaves school. This final phase is called the "exit" phase. Figure 4 illustrates the in-school assessment model. It will be noted that a critical juncture is identified in the model occurring between the grades K-8 and 9-12 phases. Each phase of the model will be explained in turn as will the concept of critical juncture.

FIGURE 4: In-School Vocational Assessment Model



A. Grades K-8 Phase

The K-8 phase of in-school assessment uses existing psychological/educational assessment data, interviews with students and parents, teacher observations during instruction, and interest, aptitude, and awareness testing. Feedback from the grades 9-12 phase should be used to determine instructional emphasis.

B. Critical Juncture

The "critical juncture" is that point in the student's schooling where it is important to collect comprehensive vocational assessment data in order to set goals and plan the secondary sequence. This generally occurs about the time when students shift from the elementary (K-8) to the secondary (9-12) programs.

The goals for critical juncture comprehensive vocational evaluation include:

- providing structure and direction for setting long-range goals and planning the secondary sequence.
- interfacing with the local career education/development sequence.
- providing a feedback loop that will permit improvement of instruction.
- insuring that the IEP becomes a part of a continuing process instead of a procedure.
- insuring that necessary and appropriate skill training take place in the secondary school.

- providing information and direction for secondary/post-secondary articulation.
- determining support needed for EEN students in mainstreamed vocational classes.

A comprehensive vocational assessment will provide feedback to students about their:

- vocational aptitudes and weaknesses.
- mastery of practical living skills.
- range of knowledge of feasible careers.
- academic skill levels.
- appropriate choices of high school courses, and career paths to consider.

C. Grades 9-12 Phase

The results of the critical juncture assessment will provide a basis for the structure and direction for this interval. Situational assessment in vocational classes, informal assessment, and formal assessment measuring will provide information regarding the vocational skill/competency mastery. IEP objectives will reflect vocational competencies expected for the student.

D. Exit Phase

When providing vocational assessment to EEN students, the methods for assessing must consider student needs in light of available school and community resources. Assessment completed during the exit phase must pinpoint vocational strengths and needs to enhance transition from school to the work place. Transition will also be affected by the personal decision-making support that is provided in the schools through the school counselor, individual assessment, vocational rehabilitation personnel, and the IEP process. Regardless of the student's post school goal the exit phase assessment initiatives of secondary school personnel can and do make a difference in the success of students facing the transition from school to working life. An exit assessment may include vocational counseling, psychological tests, occupational exploration, work samples, job tryouts with student, parents, and post-secondary school placement exit interviews.

Components and Methods of Vocational Assessment

Vocational assessments should include an analysis of a broad range of student skills and abilities that affect functioning in training, on the job, and in the community. These include but are not limited to: vocational aptitudes and abilities, vocational interest, work behaviors, potential and style, physical abilities, intellectual abilities, and job-seeking skills.

A variety of formal and informal methods are available for use in this vocational assessment. These methods include: medical, psychological, educational, and social assessments; interviews; informal teacher assessment; standardized vocational aptitude and interest tests; work samples; behavioral assessment and observational assessments; career exploration; exploratory class or shop placement, job tryout and/or situational assessment; and vocational counseling.

When to Assess

Vocational assessment is an ongoing process for identifying needed skills and information. As presented in the in-school process of assessment, there is a critical juncture where comprehensive assessment should take place. For the DVI model this point is usually before entrance into secondary education. This allows for the development of some degree of maturity on the part of the student and 3-4 years during which the resulting plan can be implemented.

Use of Results

Effective use of vocational assessment should provide useful information on the following activities:

- Direction - goal development
- Appropriate placement
- IEP development and management
- Facilitate class modifications
- Development of post-secondary goals
- Smooth transition to employment

Assessment results should be reported to the student as quickly as possible with copies

going to the parents and to the student's primary EEN teacher.

DVI Role

The DVI role in assessment is that of information gathering and coordination of various resources. Although much information will be collected from a variety of sources such as other EEN teachers, vocational teachers, and other relevant school personnel, it may be necessary for the DVI to do some direct assessment. The DVI will use this information to make recommendations at formal M-teams or student counseling sessions, and in IEP development.

DVI sites should concentrate on the development of an assessment process between the junior high schools, the high schools, and the vocational, technical and adult education system. In addition to developing VTAE linkages DVI sites should try to involve the local Division for Vocational Rehabilitation office. Both the VTAE System and DVR can, and should, be major actors in a systematic school-to-work and/or school-to-training plan based on assessment.

Some Helpful Hints

- Don't overtest.
- Use test results!
- Use results as feedback for improvement of instruction.
- Make assessment helpful, not burdensome.
- Identify information useful for curriculum development.
- Assessment should be done by the most qualified persons available.
- Check with classroom teachers before setting up assessment schedules.

RESOURCE A

Examples of Vocational Assessment

Resources Used By DVI's

Assessment resources were taken from the 1984 evaluation results. (Sixty schools submitted evaluation reports.)

- Five percent of the sites listed, used formalized assessment with DVR (Division of Vocational Rehabilitation).
- Twelve percent of the sites listed, used WCIS (Wisconsin Career Information Service).
- Twelve percent of the sites listed, used the services of a formalized Vocational Assessment Center other than DVR.

Basic vocational assessment resources must include the use of existing information, the assessing of interests/aptitudes and determination of the availability of program options.

(NOTE: The lists for aptitude tests, vocational interest inventories, and commercial work samples/systems were ranked, listing the most used resources first. The "other assessment" list was not ranked.)

Aptitude Tests (Paper/pencil Tests)

- Career Ability Placement Survey (CAPS)
- Armed Services Vocational Aptitude Battery (ASVAB)
- General Aptitude Test Battery (GATB)
- Differential Aptitude Test Battery (DAT)
- Nonreading Aptitude Test Battery

Vocational Interest Inventories

- California Occupational Preference System (COPS)
- Brigance Inventory of Essential Skills
- Ohio Vocational Interest Survey
- Career Awareness Inventory
- Wide Range Interest Opinion Test (WRIOT)
- Picture Interest Exploratory Survey (PIES)
- Social and Prevocational Information Battery (SPIB)
- Reading - Free Vocational Interest Inventory
- Career Assessment Inventory
- Career Guidance Survey
- Hall Occupational Orientation Inventory
- Career Planning Profile
- IDEAS (Interest Temperament and Values Assessment Inventory)
- Career Decision-Making System Harrington-O'Shea
- Job Awareness Inventory
- Skill Inventory Test of Vocational Abilities

Commercial Work Samples and Work Sample Systems

- Talent Assessment Program (TAP)
- Valpar Comprehensive Evaluation
- (MESA) Micro-computer Evaluation and Screening Assessment
- Wide Range Employment Sample Test (WREST)
- Career Planning System (CPS)

Other Assessment Resources

- Vocational Skills Check List (Washburn)
- Student Interviews
- Job Shadowing
- Competency Lists
- Teacher Observation
- Academic Tests
- Educational and Industrial Testing Services
- Career Planning Program
- Learning Style Assessment
- Project Discovery
- Career Scan
- California Personality Inventory
- Janus Job Planner
- Career Orientation Placement and Evaluation System

RESOURCE B

Psychometric Tests

Psychometric tests can be a valuable component of vocational assessment if they are carefully selected, administered properly, and interpreted correctly.

Selection involves matching the student's skills (e.g., mobility, reading level, math level) with the demands of the test, and checking the test's reliability and validity. All too often, this validity/reliability check is not done properly. For instance, most students who are retarded have very poor reading skills. Many students who are deaf have reading levels ranging from third to sixth grade, although individual deaf students may have much higher reading levels. Many standardized tests are not valid if used with either of these groups.

Proper interpretation should be provided by the professional giving the test and summarized in the assessment report. Tests are samples of behavior that are supposed to predict what the student is likely to do in other situations. Though many tests require training to administer and interpret, they do not deserve the aura of mystery that sometimes surounds them. Tests themselves have no mysterious power to uncover hidden secrets. They are simply tools and can be used skillfully or poorly just like any other tool.

The following list contains some vocationally-related psychometric tests. Inclusion in this list does not imply that a given test is the best one to use nor does it imply that only these should be used.

1. Interest

   - AAMD-Becker Reading Free Vocational Interest Inventory
   - Brainard Occupational Preference Inventory
   - Geist Picture Interest Inventory
   - Geist Picture Interest Inventory (deaf form)
   - Kuder Preference Record (Vocational)
   - Minnesota Importance Questionnaire
   - Ohio Vocational Interest Survey
   - Reading Free Vocational Interest Inventory
   - Strong-Campbell Interest Inventory
   - Vocational Interest and Sophistication Assessment

2. Multi-Aptitude Batteries

   - Differential Aptitude Test
   - U.S. Employment Service General Aptitude Test Battery
   - U.S. Employment Service Nonreading Aptitude Test Battery

3. Manual Skill and Dexterity

   - Bennet Hand Tool Dexterity Test
   - Crawford Small Parts Dexterity Test
   - Minnesota Assembly Test
   - Minnesota Rate of Manipulation Test
   - Minnesota Spatial Relations Test
   - Pennsylvania Bi-Manual Work Sample
   - Purdue Pegboard
   - Wells Concrete Directions Test

4. Mechanical Ability

   - Bennett Mechanical Comprehension Test
   - Revised Minnesota Paper Form Board Test
   - SRA Mechanical Aptitudes Test

5. Clerical Aptitide

   - Minnesota Clerical Test
   - SRA Typing Skills Test

RESOURCE C

Vocational Assessment Activities

Grade Eight

A. Review cumulative file on the student.

B. Interview the EEN instructor, parent and student.

C. Develop the IEP for the ninth grade year jointly with the Middle School EEN teacher.

D. Develop a class schedule for ninth grade.

E. Release time of one full day for the High School EEN teacher and one-half day for the Middle School EEN teacher will be provided for these activities.

F. Schedule and conduct an IEP conference. Participants should include Middle School EEN teacher, High School EEN teacher, parent and the student. Other staff members may be invited as needed. Vocational component to the IEP will be completed for each student.

Grade Nine

A. Gather information to determine the student's area(s) of occupational interest:

1. Formal interest tests and inventories.

2. Informal methods.

3. Interest testing can be conducted during regularly scheduled class time.

B. Quarterly, student's progress will be monitored in all vocational classes. The vocational teacher interview format should be used for this purpose. Release time will be provided in order to systematically monitor student progress in vocational classes. The DVI will assist the EEN teachers in gathering this information.

C. Help plan a schedule for the tenth grade year.

D. Schedule and conduct an IEP conference.

Grade Ten

A. Administer MESA. Use regularly scheduled class time. The DVI may assist EEN teacher in completing this assessment.

B. Continue quarterly monitoring of pupil progress in vocational classes.

C. Plan a course schedule for grade eleven.

D. Schedule and conduct an IEP conference.

Grade Eleven

A. Administer NATB.

B. Administer other interest inventories as needed.

C. Schedule and conduct a vocational staffing for each student. Participants should include: EEN teacher, principal, student, parents, counselor, psychologist, DVI and selected vocational instructors.

D. Continue quarterly monitoring of pupil progress in vocational classes.

E. Schedule and conduct an IEP conference.

Grade Twelve

A. Continue quarterly monitoring of pupil progress in vocational classes.

B. Arrange vocational planning meeting that involves the student and guidance staff. Emphasize final plans for past high school employment or further training.

C. Consider referral to other agencies, VTAE system, DVR etc.

RESOURCE D

Sample Vocational Assessment Calendar

September - Update Student's Transcripts	**October** - Quarterly Monitoring Reports - Administer MESA
November - Administer NATB - Administer Interest Inventories - Counselor Meetings with Seniors	**December** - Vocational Staffings for Juniors - Counselor Meetings with Seniors
January - Quarterly Monitoring Reports - Summarize Data on Vocational IEP Forms	**February** - Update Student's Transcript - 8th Grade Scheduling - Sophomore, Junior, Senior Scheduling
March - Quarterly Monitoring Reports - Sophomore, Junior, Senior Scheduling	**April** - IEP Development - Counselor Meetings with Seniors
May - Quarterly Monitoring Reports - IEP Development	**June**

RESOURCE E

Student _____ Class _____

Instructor _____ Date _____

Work Habits Rating

- ☐ Work Independent
- ☐ Attends to Direction
- ☐ Remains on Task
- ☐ Wastes Time

Behavior Ratings

- ☐ Compliant
- ☐ Non-Compliant
- ☐ Disruptive
- ☐ Cooperative

Academic Rating (letter grade)

- ☐ Test Scores
- ☐ Project(s)
- ☐ Class Participation
- ☐ Written Work
- ☐ Daily Assignments

Related Area Rating

Safety Rules

- ☐ Observed
- ☐ Not Observed

Interest

- ☐ Low
- ☐ Indifferent
- ☐ High

Effort

- ☐ Low
- ☐ Inconsistent
- ☐ High

Attendance

- ☐ Regular
- ☐ Frequently Present
- ☐ Prompt
- ☐ Tardy

Social Skills

- ☐ Withdrawn
- ☐ Interacts Appropriately
- ☐ Interacts Inappropriately

Project Ratings

- ☐ Low Quality
- ☐ Average Quality
- ☐ High Quality
- ☐ Not Completed

Academic Ratings

Reading Skills

- ☐ Adequate
- ☐ Not Adequate

Writing Skills

- ☐ Adequate
- ☐ Not Adequate

Math Skills

- ☐ Adequate
- ☐ Not Adequate

Describe Obstacles to Project Quality

_____

_____

_____

_____

Course Prerequisites/Skill Deficiencies *(specify)*

_____

_____

_____

Recommendations for Enrollment in Additional Vocational Courses

_____

Employability Potential

_____

Comments:

Resources C-E Marvin Wurth, 1984

RESOURCE F

Dear

To develop a total educational plan for all students in our programs, we need your help in looking at their needs in all the areas of life which will be important to them after leaving high school.

We are asking you to complete the enclosed questionnaire to give us detailed information about what you expect or desire for your son's or daughter's future employment, living arrangements, and general participation in the ongoing life of the community.

The information you will provide will assist us when evaluating your son/daughter during the Critical Juncture M-Team we will be conducting this year. Individualized Educational Plans (IEP's) will also reflect your needs and desires for your student's programming.

Thank you in advance for your completing and returning this questionnaire at your earliest convenience. If you have questions, please feel free to call us.

Sincerely,

Name, Coordinator
Designated Vocational Instructor
Telephone Number

GENERAL STUDENT INFORMATION

Student Name _____ Date _____

Student Number _____ Birthdate _____

Sosical Security Number _____

Current Address _____

Current Telephone Number _____

Parent's Name _____

Mother's Telephone Number (home) _____ (work) _____

Father's Telephone Number (home) _____ (work) _____

House Parents/Foster Parents Name _____

Emergency Telephone Numbers _____ _____

Homeroom Number _____ Homeroom Teacher _____

Case Manager _____

Transportation _____

Related Service Needs _____

Other Agencies Involved with Student _____

Other Comments:

VOCATIONAL NEEDS

1. When he/she graduates from the pubilc schools, we would most like our son/daughter to participate in:

   - ☐ Day Care/Activity Program
   - ☐ Sheltered Workshop
   - ☐ Competitive Part-Time Employment
   - ☐ Competitive Full-Time Employment
   - ☐ Other

2. In which kinds of jobs does **your son/daughter** seem particularly interested?

3. Which kinds of jobs does **he/she** really dislike?

4. Do **you** have preferences for occupational placement?

5. Are there occupations in which you object to your son's/daughter's participation?

6. If there are any medical concerns relating to your son/daughter's vocational placement, please state them.

7. What skills do you think need to be developed to help you son/daughter reach his/her vocational goal?

8. What vocational class opportunities would you like your son/daughter to experience?

DOMESTIC NEEDS

1. What duties or responsibilities does your son/daughter presently have at home?

2. What other duties would you like your son/daughter to be able to do at home?

3. Following graduation from the public schools, what do you think your son/daughter's living situation will be?

- ☐ Urban (what city?)
- ☐ Rural (what county?)
- ☐ At home
- ☐ Foster home
- ☐ Group home
- ☐ Sheltered apartment
- ☐ Independent apartment (alone, with friends, with spouse?)
- ☐ Other *(please specify)*

4. In which of these daily living areas do you feel your son/daughter needs instruction?

- ☐ Clothing care
- ☐ Meal preparation and nutrition
- ☐ Housekeeping
- ☐ Hygiene/grooming
- ☐ Health
- ☐ First aid
- ☐ Sex education
- ☐ Parenting/child development
- ☐ Consumer skills

COMMUNITY NEEDS

1. Which of the following do you see your son or daughter doing independently as an adult:

- ☐ Using public transportation
- ☐ Shopping for groceries
- ☐ Shopping in community stores
- ☐ Shopping in a mall
- ☐ Eating in a restaurant
- ☐ Personal banking
- ☐ Driving a car
- ☐ Going to the dentist
- ☐ Going to the doctor
- ☐ Applying for licenses
- ☐ Applying for services (employment, Vocational Rehabilitation)
- ☐ Applying for benefits
- ☐ Going to a barber or beauty shop
- ☐ Voting

2. Which of the above does your son/daughter presently do with family or friends?

3. Which of these activities do you want the school to stress for your son/daughter?

LEISURE/RECREATIONAL NEEDS

1. What leisure recreational activities does your son/daughter participate in when alone?

2. What leisure/recreational activities does your son/daughter participate in with your family?

3. What leisure/recreational activities does your son/daughter participate in with friends?

4. Are there any other leisure/recreational activities in which you would like to see your son/daughter participate?

5. Are there any leisure/recreational activities in which you do not want your son/daughter to participate?

6. What classes would you like your son/daughter to take in order to develop more leisure time interests and skills?

GENERAL COMMENTS

Please share information regarding your son/daughter that you feel will affect your son/daughter's education in the following areas:

Physical concerns

Behavior with adults

Behavior with friends and other students

Academic skills

_____
Guardian/Parent Signature

_____
Guardian/Parent Signature

_____
Date

Resource F and G, Susan Rood and Chris Weber, 1984.

RESOURCE G

Name _____ Date _____

Class _____ Teacher _____

EVALUATION OF PERSONAL COMPETENCIES

	1	2	3	4	5
WORK HABITS	**Needs Improvement**		**Average**		**Above Average**
On time for class					
Good daily attendance					
Begins work as soon as class starts without being told					
Works without being told to continue working					
No disruptive behaviors					
Cleans materials and work space					
Puts materials away (in proper place) when told					
Works at a satsifactory rate (completion by deadline)					
Understands written directions and asks for help appropriately					
Understands verbal directions and asks for help appropriately					
Shows flexibility as situations change					
Is willing to share group materials					
Is willing to assist team members					
Responds appropriate to criticism and correction					

Please comment on any areas of concern.

RESOURCE H

Use of Work Samples

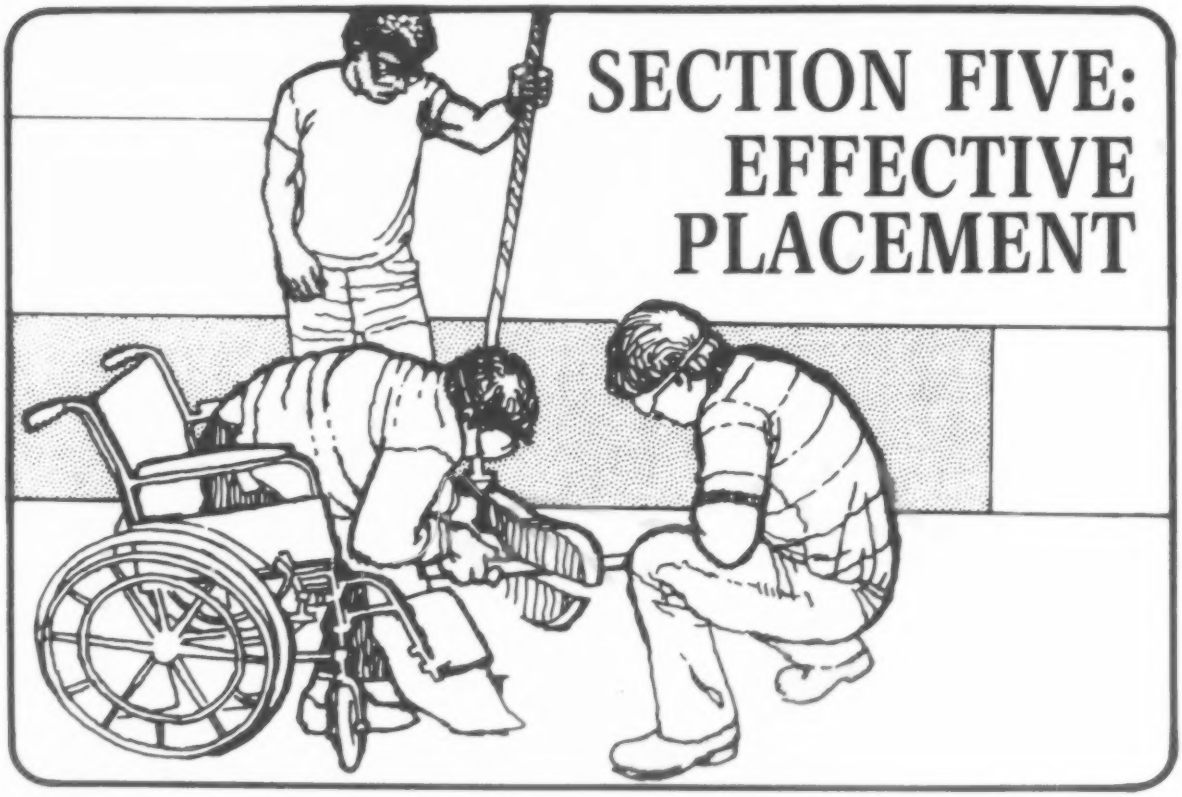
The following discussion of work samples and psychometric tests is from *Puzzled About Educating Special Needs Students'*, published by the Wisconsin Vocational Studies Center, 1980.

Work Sampling

An effective work sample parallels a specific or general work environment in its cognitive and performance requirements, physical demands, decision-making requirements, work aids, tools, and equipment. This environment can be changed to meet the physical and mental needs and limitations of each individual involved (Thomas, 1979). The evaluator's assessment techniques are crucial to effective use of work samples. These techniques vary according to the needs of each individual and the outcomes desired. A basic function of work samples in almost any setting is to provide "hands-on" exposure to a work environment, and aid in career exploration. Individuals can make better decisions about what they could and would like to do when they have an opportunity to try out different fields. Therefore, the more closely a work sample resembles a job, or elements of a job, the easier it is for the individual to compare their abilities and interests to the demands of the job in question.

There are a variety of commercial work samples and work sample systems available. Prices and training requirements for their use vary greatly. The following is a list of commonly used, commercial work sample systems. Mention here does *not* imply endorsement nor does omission of any other resource in this area imply anything about its value.

1. Brodhead-Garrett Vocational Skills Assessment and Development System
2. Comprehensive Occupational Assessment and Training
3. Hester Evaluation System
4. Micro-TOWER
5. The Singer Vocational Evaluation System
6. Talent Assessment Program (TAP)
7. The Valpar Component Work Sample Series
8. Vocational Information and Evaluation Work Sample (VIEWS)
9. Wide Range Employment Sample Test (WREST)
10. The Valpar Comprehensive Evaluation (MESA)



SECTION FIVE: EFFECTIVE PLACEMENT

PLANNING FOR PLACEMENT

In order to meet the goals of the DVI approach, appropriate placement of students with EEN in vocational education classes is critical. Before any placement decisions can be made, information regarding student interests, personality, and abilities needs to be gathered. This information is available from vocational assessments which were discussed in the previous section. The results of the vocational assessment should be used to formulate an instructional plan for the student. This plan would also consider the student's post-secondary goals.

This section of the Handbook includes some considerations of the following topics: 1) the team approach for decision making on goals and placement, 2) factors involved in developing and using post-secondary goals, and 3) factors influencing the selection of course sequences. The resource section contains formats for determining learning style and matching teaching style and student learning style.

Team Approach

Development of post-secondary goals and placement in vocational classes should be a cooperative decision by a team of involved individuals. The team could include any combination of the following: the student, their parents, EEN teachers, guidance counselors, vocational education teachers, DVI, and psychologists.

A. Students

Students should be asked to give some indication of their vocational career goals and course preferences. It should be kept in mind that these interests will often change as the students mature or have new experiences.

B. Parents

Parental support and interest is an extremely important part of goal setting and placement decisions. Parents can often provide insights into their son's or daughter's skills or interests that cannot be observed or determined within the school day. Information regarding the home or family situation may influence the attainability of post-secondary goals.

C. EEN Teachers

The EEN teacher can provide input regarding the student's academic skills, study habits, learning style, personality, and social development. The EEN teacher may also have additional information about the student's interests and aptitudes.

When post-secondary goals have been developed, the EEN teacher's input can be invaluable in selecting appropriate vocational courses and course sequences. They may also make recommendations for instructional modification that may be required for the student to have success in a vocational class.

D. Guidance Counselors

The counselor may meet with the student to discuss career choices and options prior to the conference in order to provide input at the conference regarding the student's interests. The counselor can provide information about requirements for entrance into post-secondary institutions. Counselors also have available cumulative files which can provide additional information. Information regarding graduation requirements, course offerings, and class availability should be explained by the guidance counselors or whoever is responsible for scheduling students.

E. Vocational Educators

After an indication of a student's needs and interests, the vocational education teacher can contribute to the discussion of realistic and attainable post-secondary goals. The vocational teacher's recommendations should be based upon their awareness of trends in the field and employment in the community. Once the team has agreed on reasonable career goals, the vocational educator can provide other information such as suggested courses, enabling skills, expected course competencies, activities used to achieve the competencies, and ideas for modifications of the above areas.

F. DVIs

The DVI may be asked to provide a wide variety of information. When the vocational teacher may not be released from teaching responsibilities to attend such a meeting, the DVI would be expected to have contacted the vocational teacher and obtain relevant information. This information may include enabling skills, expected course competencies, and class activities. If a situation exists where a choice of teachers may be made, the DVI could provide information to help match student-teacher personality and student learning style with teaching style. Information regarding the student's prior experiences in vocational classes will often be provided by the DVI. Previous vocational education successes, failures, and skill levels will help determine the vocational goals, course sequence, modifications, and support that might be suggested for the student.

G. Psychologists

A review of the student's psychological reports can often provide information regarding academic, personality, and psychological needs. The psychologist may be aware of the student's learning style and suggest modifications to help meet their needs. Through interviews in a psychological evaluation, the psychologist may gain information from the student regarding career goals and the student's perceptions of their ability to attain those goals.

Goal Setting

Just as vocational assessment is an ongoing process, development of post-school goals is also continuous. With time, a student's post-secondary goals become more specific. In a vocational sequence the student moves from a general overview of the vocational cluster to more specific occupational choices.

As goal development moves from general to specific, there are several factors which must be considered. General goals are influenced by the student's interest, aptitudes, and abilities. As goals become more specific, the student's experiences, successes, and failures in specific vocational education courses will influence their career desire.

As students work toward more specific vocational goals, still other factors become important. The level and amount of training available, as well as potential employment outcomes affect the attainability of the goals. The trends in the chosen field and employment opportunity in the community also influence the feasibility of the goals.

If a student does not have the necessary abilities, even if training and employment are available, the goals are not realistic. Through the process of goal development, the goals must be evaluated to be certain they are realistic for the student.

Placement in High School Classes

The student's post-secondary goals help determine appropriate class placement. As the goals become more specific within an occupational cluster, the content of the classes becomes more specific.

In addition to the student's post-secondary goals, there are other factors to consider in the vocational class placement:

- Student ability
- Course sequences
- Availability of classes
- Student learning style/teacher style
- Modification/support needed
- Time of placement decision
- Graduation requirements

Each of these factors is considered in the material which follows:

Student Ability

The prerequisite entry or enabling skills for a particular course or sequence must be considered. While these skills should be considered and can be used to help determine modification and support services, they should **not** be used to prevent a student's initial involvement in courses.

Course Sequence

The required sequence of courses will affect a student's time of entry into and continuation in the sequence. Late entry into a course sequence or the failure of a particular course may make it difficult for a student to complete the required sequence.

Availability of Classes

When making placement decisions for a particular year, the availability of the desired classes or sections is a factor that must be considered. Reasons that limit the availability of certain classes might include courses which are only offered in alternating semesters, conflicts with required courses, and limits in class size. The DVI should be aware of all the vocational alternatives available within their school so that if a needed class is not available, an alternate plan might be suggested.

Student Learning Style/Teacher Style

Where choices of specific sections are available, matching the learning style of the student with the teaching style of an instructor may be possible. If there is no choice of sections, awareness of the student's and teacher's styles will suggest modifications or intervention techniques. See Resource A for material that will be helpful in this area.

Modification/Support Needed

The modifications which may be needed for students to succeed in a class must be considered. The degree to which the instructors are willing to modify their programs may

influence the success of the students in a class. The support the students and vocational instructors will need must also be considered. Plans must be made for providing the identified support while making placement decisions.

Time of Placement

If the placement decision is made prior to a student entering high school, the options available and level of entry in a vocational sequence are different than for a student transferring in midterm or later in the secondary sequence.

Graduation Requirements

The school district's graduation requirements may dictate the number and types of courses a student takes. These requirements may limit the vocational courses available to a student who must meet other requirements at the same time.

Use of a continuing assessment program, reviews and revisions of post-secondary goals, the development of vocational plans, and early IEP revisions should lead to effective student placement in courses.

RESOURCE A

What is Your Learning Style?

List A

_____ 1. People say you have terrible handwriting.

_____ 2. You don't like silent filmstrips, pantomines, or charades.

_____ 3. You would rather perform (or listen to) music than do (or view) art, and you would rather listen to a tape than look at a filmstrip.

_____ 4. You sometimes leave out words when writing, or sometimes you get words or letters backwards.

_____ 5. You can spell out loud better than when you have to write it down.

_____ 6. You remember things you talk about in class much better than things you have to read.

_____ 7. You dislike copying material from the blackboard or bulletin boards.

_____ 8. You like jokes or riddles better than cartoons or crossword puzzles.

_____ 9. You like games with lots of action or noise better than checkers or most other board games.

_____ 10. You understand better when you read aloud.

_____ 11. Sometimes you make math mistakes because you don't notice the sign or because you read the numbers or directions wrong.

_____ 12. It seems like you are the last one to notice something new – e.g., that the classroom was painted or that there is a new bulletin board display.

_____ 13. Map activities are just not your thing.

_____ 14. You must struggle to keep neat notes and records.

_____ 15. You use your fingers as a pointer when you read.

_____ 16. You frequently hum or whistle to yourself when you are working.

_____ 17. Sometimes your eyes just "bother" you, but your eye tests comes out all right, or you have glasses which your eye doctor says are just right for you.

_____ 18. You hate to read from ditto sheets, especially blotty ones.

_____ 19. "Matching texts" questions are a problem to sort out (over and above not knowing some of the answers.)

_____ 20. Sometimes when you read you mix up words that look similar (pill-pull, bale-hale).

_____ **SCORE: NUMBER ANSWERED YES**

List B

_____ 1. It seems like you always have to ask somebody to repeat what they just said.

_____ 2. Sometimes you may find yourself "tuned out" – staring out the window maybe – when you were really trying to pay attention to something.

_____ 3. Often you know what you want to say, but you just can't think of the words. Sometimes you may even be accused of "talking with your hands," or calling something a "thingamajig" or a "whatyamacallit."

_____ 4. You have been in speech therapy at some time previously.

_____ 5. You may have trouble understanding a person who is talking to you when you are unable to watch the person's face while they are speaking.

_____ 6. You would rather receive directions in a demonstration format than in spoken form.

_____ 7. When you watch TV or listen to the radio, someone is always asking you to turn it down.

_____ 8. You family says that you say "huh?" too much.

_____ 9. You would rather demonstrate how to do something than make a speech.

_____ 10. Spoken words that sound similar (bell, bill, pin or pen) give you trouble. Sometimes you can't tell them apart.

_____ 11. You have trouble remembering things unless you write them down.

_____ 12. You like board games such as checkers better than listening games.

_____ 13. Sometimes you make mistakes in speaking (like saying "he got expended from school").

_____ 14. You like art work better than music.

_____ 15. You have to go over most of the alphabet to remember whether e, g, m comes before r.

_____ 16. You like it better when someone **shows** you what to do, rather than just telling you.

_____ 17. You can do a lot of things that are hard to explain with words – like fixing machines or doing macrame.

_____ 18. You usually answer questions with "yes" or "no" rather than with complete sentences.

_____ 19. Often you forget to give verbally received messages (such as telephone messages) to people unless you write them.

_____ 20. You are always drawing little pictures on the edges of your papers, or doodling on scratch paper.

_____**SCORE: NUMBER ANSWERED YES**

If list A is very much higher than list B, the person in question could be considered an auditory learner. If list B is much higher, it indicates that the person in question might be considered a visual learner. If both lists are high, this person's best learning mode would probably be touching and doing.

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RESOURCE B

What is Your Learning Style?

Your strongest learning style is **VISUAL** if you:

1. Are good at art and visualization projects.
2. Are skillful and enjoy developing and making graphs and charts.
3. Do better at academic subjects by reading the textbook.
4. Feel the best way to remember is to picture it in your head.
5. Follow written directions better than oral directions.
6. Like to write things down or take notes for visual review.
7. Write things down on index cards for visual review or memorization.
8. Make comments like, "I can't picture what you're saying," or "I don't see what you mean."
9. Are good at working jigsaw puzzles.

Your strongest learning style is **AUDITORY** if you:

1. Have good listening skills.
2. When given a choice, would rather talk than read.
3. Do better at academic subjects by listening to lectures and tapes.
4. Move lips when reading to yourself.
5. Can tell if sounds match when presented with pairs of sounds.
6. Follow oral directions better than written directions.
7. Need explanation of visual directions or diagrams to fully understand.

Your strongest learning style is **TACTILE** if you:

1. Frequently play with coins in pocket.
2. Constantly want to grip an object in hand during learning period.
3. Feel very comfortable touching others, hugging, handshaking, etc.
4. Enjoy working with tools.
5. Chew gum or smoke incessantly.
6. Remember best by writing things down several times.
7. Bear down extremely hard with pen or pencil when writing.
8. Learn spelling best by "finger spelling" the words.

Taken from: Learning Disability Clinic
Ventura College, CA

VSC-UW-Madison

What is Your Learning Style? (Profile)

NAME: _____

DATE: _____

I. Environmental:
- Sound _____
- Light _____
- Temperature _____
- Design _____

II. Emotional:
- Motivation _____
- Persistence _____
- Responsibility _____
- Structure _____

III. Sociological:

Appears to work best: (alone, with peer(s), with adult(s), in a variety of ways.

1. _____
2. _____
3. _____

IV. Physical:
- Perceptual Preferences _____
- Intake _____
- Time _____
- Mobility _____

VSC-UW-Madison

RESOURCE C

Checklist for Discovering Learning Channels

1. STRONG IN VISUAL CHANNEL

_____ 1. Likes to keep written records

_____ 2. Typically reads billboards while driving or riding

_____ 3. Puts model together correctly using written directions

_____ 4. Follows written recipes easily when cooking

_____ 5. Reviews for a test by writing a summary

_____ 6. Writes on napkins in a restaurant

_____ 7. Can put a bicycle together from a mail-order house using only the written directions provided

_____ 8. Commits a zip code to memory by writing it

_____ 9. Uses visual images to remember names

_____ 10. A bookworm

_____ 11. Plans the upcoming week by making a list

_____ 12. Prefers written directions from employer

_____ 13. Prefers to get a map and find own way in a strange city

_____ 14. Prefers reading/writing games like Scrabble

2. STRONG IN AUDITORY CHANNEL

_____ 1. Prefers to have someone else read instructions when putting a model together

_____ 2. Reviews for a test by reading notes aloud or by talking with others

_____ 3. Talks aloud when working a math problem

_____ 4. Prefers listening to a cassette over reading the same material

_____ 5. Commits zip code to memory by saying it

_____ 6. Uses rhyming words to remember names

_____ 7. Plans the upcoming week by talking it through with someone

_____ 8. Talks to self

_____ 9. Prefers oral directions from employer

_____ 10. Likes to stop at a service station for directions

_____ 11. Prefers talking/listening games

_____ 12. Keeps up on news by listening to the radio

_____ 13. Able to concentrate deeply on what another person is saying

_____ 14. Uses free time for talking with others

3. STRONG IN TOUCH/MOVEMENT CHANNEL

_____ 1. Likes to build things

_____ 2. Uses sense of touch to put a model together

_____ 3. Can distinguish items by touch when blindfolded

_____ 4. Learns touch system rapidly in typing

_____ 5. Moves with music

_____ 6. Doodles and draws on any available paper

_____ 7. An out-of-doors person

_____ 8. Moves easily, well coordinated

_____ 9. Spends a large amount of time on crafts and handwork

_____ 10. Likes to feel textures of drapes and furniture

_____ 11. Prefers movement games to games where one just sits (this may also be a function of age)

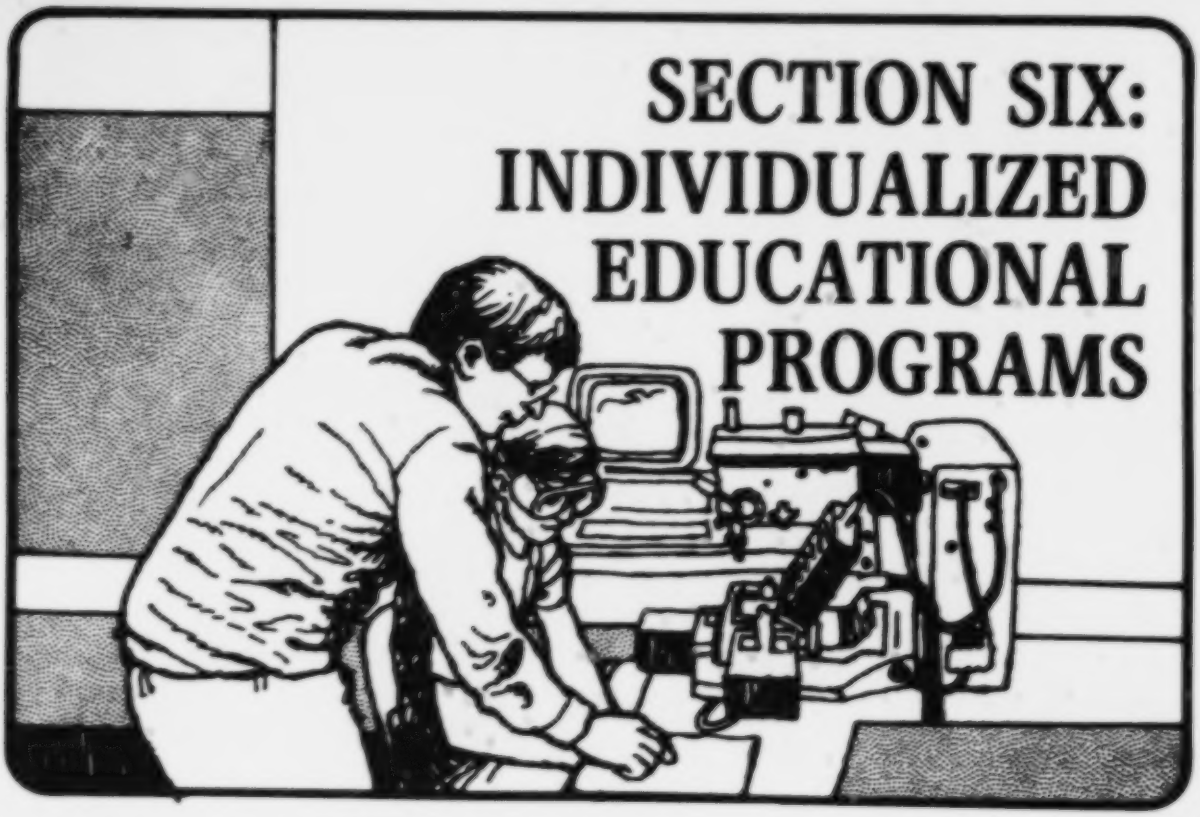
_____ 12. Finds it fairly easy to keep fit physically

_____ 13. One of the fastest in a group to learn a new physical skill

_____ 14. Uses free time for physical activities

From How to Help a Friend by Paul Welter, Ed.D. Published by Tyndale House Publishers, 1978
SELF/October 1981

VSC, UW-Madison



SECTION SIX: INDIVIDUALIZED EDUCATIONAL PROGRAMS

DEVELOPING THE IEP/SKILL MASTERY

An individualized educational program (IEP), as mandated by PL 94-142, must be developed for each school-aged student with exceptional educational needs (EEN). The IEP should include a variety of information including a statement of vocational goals and objectives. The intention of the vocational component is to strengthen the quality and range of service to students with EEN. The IEP should also identify criteria for evaluating the student's level of vocational skill mastery. This section of he Handbook will provide the DVI with information related to: 1) the components of an IEP, 2) the process for the development and utilization of the vocational component of the IEP, and 3) evaluation of skill mastery.

IEP Components

The content of an individual educational plan provides a framework within which the DVI can plan for each specific area of student need which requires intervention. The following seven components should be found in every IEP:

- Documentation of the student's current level of educational performance.
- Annual goals or the attainments expected by the end of the semester or school year. These can include academic, behavioral, social, emotional, and vocational skills that the students should master to meet their goals.
- Short-term objectives, stated in performance terms. These are the intermediate steps leading to the mastery of skills as identified by the annual goal. A performance-based competency checklist can be attached to a local IEP form.
- Documentation of the individual responsible for the implementation of the short-term objectives.

- Indication of the extent of time a student will participate in regular education and special education program and a timeline for skill attainment.
- Projected dates for initiating services and the anticipated duration of services.
- Evaluation procedures and schedules for determing mastery of short-term objectives.

Development of the Vocational Aspects of the IEP

If the student with exceptional educational needs can successfully participate in the vocational class without significant modification or support, a specific vocational IEP is not required. However, if a program modification in a vocational area is necessary, an IEP must be developed which identifies the goals and objectives and intervention strategies necessary for attainment of the goals. See Resource A for Steps to Follow in the Development and Use of the Vocational Component of an IEP. The vocational educator, with their expertise of the content area, and the DVI with their knowledge of the student with EEN, design the goals and objectives to best meet the student's identified needs and interests. The inclusion of behaviorally written vocational objectives will provide the basis for measurement of skill mastery. Resource B provides examples of vocational goals and behaviorally written vocational objectives.

Developing the vocational component of the IEP is an interdisciplinary effort requiring cooperation between the DVI and the vocational instructor. Resource C deals with the concerns and recommendations expressed by vocational educators related to the IEP process. The process used in the development of the vocational component can be facilitated by following a systematic procedure. Again, Resource A, is a checklist that can be used by the DVI in this process.

The student's involvement in the development of their IEP is highly desirable. This involvement promotes more student responsibility in mastering specific vocational skills. The IEP objectives can also be used as a form of contractual agreement among the student, the vocational education teacher, and the DVI.

Parental involvement in the development of the IEP is also a value in the attainment of vocational objectives. Input into the development goals and objectives encourages parents to provide active support in meeting the vocational needs of their child. Resource D covers concerns and recommendations expressed by parents related to developing IEPs for handicapped students in vocational education.

Evaluating the Level of Skill Mastery

The vocational educator, with their expertise of the vocational content area, has the primary responsibility for evaluating the skill mastery of students with EEN. The DVI has the responsibility to help the vocational educator accurately evaluate criteria that correlates with objectives on the IEP. Skill mastery must be attained by the student for acquisition of job skills identified in broad or specific job clusters. The level of skill mastery can be determined by using numerous techniques. The determination of the method used is dependent on the criteria established by the IEP team within a specific goal.

The evaluation criteria is identified when the goals and objectives are stated in a measurable and observable manner. This takes into account the competencies, modifications, and predetermined criteria for determining the student's skill level. Methods for recording skill mastery when a competency-based evaluation method is used can be found in the section on Competency-Based Instruction.

On a regular basis the DVI should observe and evaluate the student's progress to assure consistency in the evaluation of skill mastery.

Enhancement of Skill Mastery

The DVI and vocational educator have the responsibility for providing the student with EEN opportunities to enhance their level of skill mastery. The following are suggestions for the DVI and vocational educator for enhancing skill mastery.

- Provides the student with a variety of developmental activities that challenge, but not frustrate, the student.

- Allow the student the opportunity and time to practice the skills for improving competencies, and provide supportive instruction when needed.
- Identify which lab activities simulate working conditions that might be encountered by the student in the world of work. Provide work related skills by direct application or simulation.
- Provide the EEN student with a wide variety of skill development techniques.
- Keep educational activities valid.
- Provide the student with the opportunity to complete a project independently to the best of their ability. This opportunity helps provide the student with a feeling of success, develops pride in work, and enhances self concept. Students should be allowed to demonstrate acquired skills in sequence for the successful completion of a useful project. This allows the students to complete their project.
- Have all phases of the project incorporate the newly acquired skills.
- Provide opportunities for students to participate in field trips to business and industry. This experience will help the student to identify and determine their skills and future vocational training for entry into specific occupational clusters.
- Encouragement of students who have attained skills which would allow them entrance into competitive employment should be part of a vocational education occupational preparation program or vocational work experience programs.

RESOURCE A

Steps Followed in the Development and Use of the Vocational Components of an IEP

Student's Name: _____ **School Year:** _____

_____ 1. Selected or developed an assessment instrument which assisted in the determination of vocational interests, aptitudes, and skills related to vocational/occupational areas.

_____ 2. Conducted a student assessment to obtain data which determined student's present performance levels.

_____ 3. Determined vocational programs which best reflects and will meet identified student behaviors, (i.e., strengths, weaknesses, vocational interests, aptitudes, skills, socialization, academic) based upon assessment data.

_____ 4. Met with appropriate vocational instructor and shared results of vocational assessment in terms of placement in a specific vocational area.

_____ 5. Recorded on IEP the present level of performance as related to assessment data or past vocational placement exposure.

_____ 6. Determined with the vocational instructor annual vocational goal(s) for the student for each specific vocational area.

_____ 7. Determined with the vocational instructor short-term instructional objectives stated in behavioral terms, and the scope and sequence in which these skills will be acquired.

_____ 8. Determined with the vocational instructor the timeline (beginning and ending) date for acquisition of identified skill objectives.

_____ 9. Determined and listed special education or supportive services that will be provided for each student.

_____ 10. Obtained signatures and title of individual(s) responsible for the implementation of short-term objectives.

_____ 11. Stated the amount of time the student will spend in the vocational area each day.

_____ 12. Established criteria for evaluation - NOTE: If annual goals are properly stated, these can suffice as evaluative criteria.

_____ 13. Established with the vocational educator a realistic grading criteria based upon the student's capabilities to acquire and master those identified skills.

RESOURCE B

Vocational Aspects of the Individual Education Plan

Student _____ Grade _____ Date _____

DVI Teacher _____ Vocational Instructor _____

Long Range Objectives:

1. Student will be able to demonstrate job entry-level skills in construction trades sub-cluster of carpentry
   ___ Accomplished
   ___ Progress being made
   ___ Objective dropped
   Comments:

Short-Term Objectives:

1. Student will be able to demonstrate basic skills in measuring, layout, and checking
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Dropped
   Comments:

2. Student will be able to demonstrate basic skills in using hand saws
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Dropped
   Comments:

3. Student will be able to demonstrate basic skills in using power saw
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Objective dropped
   Comments:

4. Student will be able to demonstrate basic skills in using hand drilling tools
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Dropped
   Comments:

5. Student will be able to demonstrate basic skills in using power tools
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Objective dropped
   Comments:

6. Student will be able to demonstrate basic skills in using driving tools
   ___ Accomplished
   ___ Progress being made
   ___ Progress not made
   ___ Dropped
   Comments:

*Developed from State Curriculum Guides or Curriculum Supplements from the Vocational Aspects of the IEP, Douglas H. Gill, Project Coordinator, Georgia Southern College, 1978.

RESOURCE C

Major Concerns of Vocational Educators and Recommendations for Improving IEP Process

Initial Development of IEP

Concerns: Vocational teachers have little or no contact with child study team or the guidance department prior to the student being assigned to their classes.

The vocational goals formulated by the IEP team are, in many cases, unrealistic, demonstrating limited knowledge of course requirements. Students are assigned or "dumped" according to what shop has an opening rather than based on assessment of student needs.

Recommendations: Sufficient time should be allocated for the vocational teacher to meet with IEP team prior to actual student assignment.

Implementation of Student's IEP

Concerns: Few districts have the necessary communication system that enables the vocational teacher to report ongoing progress of the student to the IEP team.

Once a student is assigned a particular vocational program, few districts have exhibited the flexibility in scheduling to permit significant changes in student's IEP.

Vocational educators need more inservice training to better serve special needs students.

Recommendations: Have a person with both special and vocational education background act as a liaison between vocational teacher and IEP team.

Need greater flexibility in scheduling to avoid the problem of students being "locked" in a program which seems to result from decision makers being controlled by the computer.

Have inservice meetings that include interaction between special and vocational educators.

Review of Student's IEP

Concerns: The vocational teacher is usually not involved in the review process, but should provide information regarding student progress.

Recommendations: Schedule review meeting when vocational educators can attend.

RESOURCE D

Major Concerns of Parents and Recommendations for Improving IEP Process

Initial Development of IEP

Concerns: Many parents are not involved in the development of the IEP. They are asked to simply sign the completed document.

Many parents stressed a need for more information concerning their roles and rights in the IEP process.

A strong feeling voiced by many parents was that their children were being placed in programs based on available openings rather than on the child's aptitude or interest.

Recommendations: Conduct the initial team meeting at a time that permits both parents to participate, such as during the summer or in the evenings during the school year.

Establish procedures and conditions whereby parents are, in fact, serving as partners with other IEP team members.

Implementation of Student's IEP

Concerns: Parents are often not informed when significant changes are made in their child's IEP. Sometimes they don't find out about changes until the end of the school year or at the beginning of the following school year.

Recommendations: Inform parents of child's progress on a continual basis.

In addition to child's vocational progress, the ongoing reports should include information concerning social and emotional adjustment.

Establish greater flexibility in school curriculum to permit, when necessary, important changes in child's program.

Review of IEP

Concerns: Several parents reported that although the IEP had been reviewed, the parents were not part of the process and were simply informed of the results.

Recommendations: Involve parents in review process. Greater likelihood of parent involvement if meeting is scheduled at a convenient time for all parties concerned. In addition to receiving information on what the child has accomplished, suggestions as to activities that parents may do to help the child progress would be helpful.

RESOURCE E
Master Goal List

Long-term goal A: Student will acquire skills in power mechanics

Annual goal 1. Will acquire knowledge regarding history of power mechanics

Short-term goal
- a. water
- b. wind pipe
- c. steam pump
- d. generator
- e. battery
- f. light bulb
- g. steam power

Annual goal 2. Will match inventor with invention

Short-term goal
- a. mass production of cars
- b. electronics
- c. space travel
- d. nuclear energy

Annual goal 3. Will acquire knowledge of energy resources

Short-term goal
- a. identifies three major sources of fossil fuels
- b. identifies how fossil fuels are formed
- c. identifies pollutants associated with burning fossil fuels
- d. identifies alternative energy sources-solar panels and geothermic

Annual goal 4. Will demonstrate knowledge of steam power

Short-term goal
- a. identifies how and where we use steam power
- b. explains how a steam engine is constructed and works
- c. identifies fuels that are used to produce steam
- d. explains the changes in volume when a liquid changes to gas
- e. identifies that 80% of electricity is generated by steam turbine

Annual goal 5. Will acquire knowledge regarding energy

Short-term goal
- a. identifies 3 forms of energy--photo, thermal, chemical
- b. identifies 3 forms of energy--electrical, nuclear, mechanical
- c. identifies examples of interchange energy forms
- d. explains the law of conservation of energy
- e. identifies 3 parts of a transformer
- f. demonstrates how low voltage transformers work
- g. demonstrates how high voltage transformers work
- h. computes input, output and turns ratios with one unknown variable
- i. identifies laws of magnetism and electricity
- j. identifies that like magnets repel and unlike magnets attract
- k. explains when a magnetic field is created
- l. explains the difference between volts, ohms, and amps
- m. identifies sinesoidal wave forms (AC)
- n. demonstrates knowledge of an electric motor
- o. demonstrates knowledge of a battery
- p. defines what a conductor is
- q. defines what an insulator is
- r. explains why we produce AC rather than direct current (DC)

Annual goal 6. Will demonstrate appropriate safety practices

Short-term goal
- a. identifies the reasons for the use of safety glasses
- b. wears safety glasses when needed
- c. identifies why you don't clean parts with gasoline
- d. identifies dangers of using flammable fluids in closed area
- e. identifies what spontaneous combustion is

f. identifies the dangers of carbon monoxide
g. identifies the dangers of electrical shock

Annual goal 7. Will properly use tools and machines
Short-term goal
a. matches tools and machines with description of function
b. identifies safe working procedures for hand tools
c. identifies safe working procedures for machines
d. identifies function of torque wrench
e. identifies part of micrometer
f. explains how to read micrometer
g. explains how to care for micrometer
h. is able to do 10 micrometer problems

Annual goal 8. Will acquire knowledge regarding the internal combustion engine
Short-term goal
a. explains the theory of operation
b. explains the engine construction
c. identifies the parts
d. explains the function of the valve train system
e. explains the function of the ignition system
f. explains the function of the carburetion system
g. explains the function of the lubrication system
h. explains the function of the cooling system
i. explains the function of the emission
j. explains the function of the compression system

Annual goal 9. Will tear down, inspect, and re-build engine
Short-term goal
a. takes engine apart in systematic order
b. is able to read an engine manual
c. measures each engine part with micrometer
d. compares each measurement with manufacturer's specifications
e. determines whether the used part is good or not
f. reassembles the engine
g. determines whether the engine operates successfully

Annual goal 10. Will maintain appropriate behavior in power mechanics class
Short-term goal
a. is punctual to class
b. is able to work independently with little supervision
c. brings pen and pencil to class
d. brings lock for locker
e. brings shop jacket if available

Annual goal 11. Will have the following prerequisites skills
Short-term goal
a. is able to square numbers
b. is able to add four digit numbers
c. is able to subtract four digit numbers
d. is able to multiply four digit numbers
e. is able to divide four digit numbers
f. is able to use "pi" in solving problems
g. is able to find the area of a square
h. is able to find the area of a circle
i. is able to determine cubic volume of a cylinder
j. is able to simplify fractions
k. is able to compute proper fractions between 1/32 and 2/32
l. is able to identify number of degrees in a circle

m. is able to identify number of degrees in a right angle
n. is able to identify number of degrees in a half circle
o. is able to read a ruler to the -/64 place
p. is able to explain the concepts of leverage and torque
q. is able to identify the boiling and freezing points of water
r. is able to determine what atmospheric pressure is in PSI
s. is able to identify the common chemical elements

Long-term goal B: Students will acquire basic agricultural knowledge

Annual goal 1. Will acquire knowledge of Wisconsin agricultural history

Short-term goal
a. completes questions in Student Handbook
b. memorizes FFA creed
c. identifies 10 basic motions of parliamentary procedures
d. demonstrates knowledge of 10 motions of parliamentary procedures

Annual goal 2. Will complete crop unit

Short-term goal
a. defines terminology
b. identifies formulas for photosynthesis
c. identifies formulas for respiration
d. identifies parts of a flowering plant
e. identifies types of inflorescences
f. identifies 24 specimens of crops
g. identifies 14 specimens of seeds
h. identifies 15 specimens of weeds

Annual goal 3. Will complete chemical weed control unit

Short-term goal
a. identifies chemical names and how they work
b. identifies reasons why herbicides don't work
c. distinguishes between commercial insecticides
d. identifies safety factors in handling herbicides

Annual goal 4. Will complete soils unit

Short-term goal
a. defines terminology
b. identifies what causes soil formation
c. demonstrates proper use of texture triangle
d. identifies the soil structure
e. explains the development of the soil structure
f. identifies the texture of the soil by the "feel" method
g. explains what soil particles are
h. explains where soil particles come from

Annual goal 5. Will complete the dairy cattle and livestock judging units

Short-term goal
a. identifies parts of a dairy cow
b. explains what to look for when judging dairy cattle
c. identifies parts of a beef cattle
d. explains what to look for when judging beef cattle
e. identifies parts of a sheep
f. explains what to look for when judging sheep
g. identifies parts of a swine
h. explains what to look for when judging swine
i. identifies terminology used in dairy cattle and livestock judging

Annual goal 6. Will complete animal nutrition units

Short-term goal
a. identifies different types of digestive systems in animals
b. explains how the ruminant digestive works
c. explains how the monogastric digestive system works
d. defines the terms-proteins, carbohydrates, fats, minerals
e. develops a food "ration" for an animal

Annual goal 7. Will complete the sheep, swine, beef, and dairy breeds' units

Short-term goal
a. identifies 6 types of sheep breeds
b. identifies the countries where these sheep breeds came from
c. identifies 9 types of swine breeds
d. identifies the countries where these swine breeds came from
e. identifies the sexes of swine
f. identifies different types of swine operations
g. identifies 12 types of beef breeds
h. identifies the countries where these beef breeds came from
i. identifies 9 types of dairy breeds
j. identifies the countries where these dairy breeds came from
k. identifies the performance facts of the various breeds
l. defines terms-lactation, gestation, dry period, estrus
m. defines terms-estrus cycle, calving period
n. determines how many pounds of milkfat in 100 pounds of milk
o. identifies cow's age at beginning of lactation
p. identifies pounds of milk for that cow's lactation period
q. identifies pounds of milkfat for that cow's lactation period
r. identifies length of days and time per day that cow is milked
s. identifies the testing agency for that cow

Annual goal 8. Will complete meat identification unit

Short-term goal
a. identifies wholesale cuts of meats
b. identifies retail cuts of meats
c. identifies skeletal structure in meats
d. identifies muscle structure in meats
e. defines terminology

Annual goal 9. Will complete land judging unit

Short-term goal
a. identifies the parts of a land judging score card
b. estimates the slope of the land

Annual goal 10. Will complete dairy products

Short-term goal
a. identifies the various types of cheeses by color
b. identifies the various types of cheeses by texture
c. identifies the various types of cheeses by taste

Annual goal 11. Will complete the agricultural careers unit

Short-term goal
a. identifies types of agricultural careers
b. explains the type of work involved in each career
c. identifies the training needed for each career

Annual goal 12. Will maintain appropriate behavior in basic agricultural class

Short-term goal
a. is punctual to class
b. brings notebook and pencil to class daily
c. maintains daily log of class activities
d. maintains appropriate behavior without directions from teacher

Long-term goal D: Student will acquire knowledge of basic graphics

Annual goal 1. Will acquire knowledge regarding graphics industry

Short-term goal
a. explains that there is a need for communication
b. explains the evolution of graphic communication
c. identifies facts about the graphic industry
d. identifies the 4 different types of printing
e. applies the 4 different types of printing to various projects

Annual goal 2. Will make 2 simple paste-ups involving 2 composite methods

Short-term goal
a. chooses a design
b. prepares the paste-up
c. prepares the flat
d. burns the plate
e. develops the plate
f. prints 50 copies
g. hands in one copy to instructor

Annual goal 3. Will make 2 complex paste-ups involving 2 composite methods

Short-term goal
a. chooses a design
b. decides on composition methods and sizes
c. tapes white paste-up sheet on drawing board
d. outlines project with blue guidelines
e. glues composition materials to paste-up sheet
f. uses black pen for trim marks
g. uses Liquid Paper to whiten any spots not desired
h. hands in project to instructor

Annual goal 4. Will make image carries for offset press

Short-term goal
a. makes a paste-up
b. makes a line negative
c. prepares a flat
d. makes the image carrier (or the plate)
e. attaches image carrier to the press
f. runs off 50 copies on offset

Annual goal 5. Will make hand-cut stencil

Short-term goal
a. chooses a design
b. tapes design to back of hand-cut stencil material
c. cuts out image area using knife or razor blade
d. removes tape on design
e. adheres stencil to screen with water
f. allows stencil to dry
g. removes backing sheet
h. blocks out the areas around the stencil with paper or solution
i. puts a supply of ink onto the screen with an ink knife
j. spreads ink over image area with squeegee
k. prints all desired copies
l. puts excess ink back into can
m. closes lid and puts can away
n. cleans ink knife and squeegee
o. puts ink knife and squeegee away
p. removes paper blockout and throws it away
q. cleans ink from screen

r. rinses screen
s. cleans work area
t. hands in one copy of work to instructor

(This master goal list was developed to be used on a microcomputer.)

RESOURCE F

Vocational Component
Individual Education Program
Page ____ of ____

Student _____ **Grade** _____

Student Expressed Interests

_____

_____

_____

Interest Testing Results

_____

_____

_____

Occupational Experience

_____

_____

_____

Aptitude Testing Results

_____

_____

_____

Vocational Class Performance Summary

Class: _____

_____

_____

Vocational Class Performance Summary

Class: _____

_____

_____

Vocational Class Performance Summary

Class: _____

_____

_____

Vocational Class Performance Summary

Class: _____

_____

_____

Vocational Strengths

_____

_____

_____

Long Range Vocational Plan

_____

_____

_____

Vocational Classes

_____

_____

_____

RESOURCE G

Vocational Profile

Name: _____ **Student No.** _____ **D.O.B.** _____

Date of Report: _____ **Grade:** _____

Interest Areas:

Abilities and Skills:

Vocational Profile
(Page 2)

Aptitudes:

Attitudes and Behaviors:

Submitted by:

_____ _____

_____ _____

Forms G and F developed by Chris Weber and Sue Rood, 1984

RESOURCE H

Vocational Plan
Date of Report

Name: _____ **Student No.** _____ **D.O.B.** _____

Long Range Vocational Goal: _____

_____

_____

Recommended High School Courses:

Recommended Community Experiences:

Recommended Home Experiences:

Recommended Clubs and Activities:

_____ _____

_____ _____

SECTION SEVEN: COMPETENCY BASED INSTRUCTION

COMPETENCY-BASED INSTRUCTION

Competency-based instruction may be useful to both the DVI and vocational instructor as well as the student with exceptional educational needs. It includes the elements of 1) behaviorally stated objectives, 2) observable behaviors, and 3) measurable behaviors. Competency-based instruction may be used at various stages during a student's vocational progression--prior to placement, during placement, and upon completion of the vocational course. The advantages of using competency-based instruction at each of these stages is described as follows.

Prior to Placement

Prior to placement of EEN student in the vocational education class, competency-based instruction can be used for:

- *Previewing vocational education classes.* Competency-based instruction allows the special education instructor to preview the vocational education class for placement decisions.

- *Developing IEPs.* Specific instructional skills can be matched to the student's strengths. Thus, targeting student objectives for IEPs is much easier and objectives are successfully obtained.

- *Identifying entry-level skills.* Behavioral competencies also have a potential for use among students not ready for regular vocational education classes. These students may lack enabling skills. The list would enable the DVI to identify the skills needed for class entry.

- *Adapting curriculum*. Once a vocational educator and special educator have identified the enabling skills, the special educator can develop an adapted curriculum.

During Enrollment

While the EEN student is enrolled in the vocational education class, competency checklists provide opportunity for accountability data as well as a system for monitoring student progress. Providing accountability is necessary for obtaining and maintaining support from the following individuals:

- *Administrators*. The actual listing of skill development and attainment allows the administration to tell the community, state, and federal agencies what specific skills the students are learning.

- *Parents*. The parents are informed about present and expected levels of skill attainment within specific vocational areas.

- *Vocational educators*. The behaviorally-stated competencies establish the criteria for EEN students to be successful in their classes. Ideal situations would provide early entrance and exit from vocational classes through the use of these behavioral competencies.

Monitoring student progress is also achieved through the use of competencies. Special education instructors may use the behavioral objectives of competency-based instruction for ongoing monitoring of EEN students in vocational education classes. Unit by unit skill listing enables EEN instructors to identify problem areas and thus determine appropriate remediation techniques. This ongoing process circumvents having a student fall behind to a failure level.

Upon Completion

Once the student has finished the vocational course, the competency-based checklist information can be used to:

- *Measure skill development*. Competency-based instruction allows the DVI to observe and measure successful and unsuccessful attainment of specific skills.

- *Provide an employability advantage*. In some ways competency charts may be shared with prospective employers. The employer can then identify the skills that the applicant has obtained.

- *Provide a VTAE Advantage*. Competency charts might also be taken to a Vocational Technical Adult Education (VTAE) institution. Here it could be used to determine appropriate classes for the student.

Developing a Competency-Based Instructional Program

Competency based instructional programs can be developed by vocational educators, special educators or a combination of both. Included for review here are examples of each approach.

The medium size school competency checklist evolved out of a three step process carried out by the vocational educators. First, individual teachers were asked to identify what it was they taught--what specific skills were covered in their vocational classes. This was done in a number of different vocational areas. Then, as separate departments, the vocational educators compiled instructional grids that identified in which courses specific skills were introduced, developed, and finally, mastered. Once the instructional grids identified where each specific skill was to be introduced, developed, and mastered, the competency checklist was developed. (Resource A, contains instructional grids for different vocational education courses which were developed by the vocational teachers.)

It was the intent in the large urban schools to expand and refine the delivery of vocational assessment/education services to secondary EEN students. After consultation with a university, competencies and enabling skills were developed in order to facilitate appropriate placement, gather data pertaining to future vocational needs, and finally to provide a brief, usable profile of the student's career orientation and skill levels. (Resource B contains a copy of the competencies. The approach used illustrates the second approach to developing a competency-based instruc-

tional program--an adaptation of the vocational education curriculum by special educators.)

A third approach to development of a competency-based program was used in a small rural school. Here it was found to be beneficial for vocational education and special education staff to work together in developing competencies. The process they used was for the vocational education and special education teacher to receive release time to work in a non-school setting. This kept participants free from students and other interruptions. Here the teachers worked together using exising curriculums. The team broke objectives into behavioral competencies.

Technical Competency Rating Forms can be used to keep students informed about progress toward skill mastery. This evaluation material can be presented using a checklist system (e.g., not competent, partially competent, competent). It is important that the evaluation criteria on the job sheets correlate with objectives on the IEP. (See Resource D)

Another form (see Resource E), Competency Skill Rating Form, can be used for a more detailed description. It also provides documentation which illustrates those skills and abilities that the student has mastered. This information is useful in demonstrating accountability and for placement of students in future vocational courses and/or occupational development.

On a regular basis the DVI should observe and evaluate the student's progress to assure consistency in the evaluation of skill mastery.

Some Helpful Hints

A number of helpful hints can be offered to assist the DVI in the process of developing a competency-based instructional program. They include the following:

- When planning for the development of competencies, it is important to be aware of participants' present knowledge of competency-based instruction. Inservice may be needed prior to developing competencies.
- If it is necessary to convince the staff of the value of competency-based instruction, stress that past inappropriate placements and grading problems might have been avoided had this approach been used.
- Consider what is the most appropriate time in your school when scheduling to develop competencies. Many schools set-aside time during the school day. Other districts offered an extended contract to participants.
- Be realistic when setting timelines for the completion of competency lists. You need to consider the participants who are involved as well as the length of the curriculum you are converting to a competency-based approach.
- When it is necessary to place participants on teams, it is important to consider potential working relationships between participants.

Evaluation of Effectiveness

As indicated earlier, there are many advantages to the use of competency-based instruction. DVIs who have worked with competency-based curriculums or checklists have found them to be very helpful in many of the ways previously listed.

Many districts have been moving toward competency-based instruction in vocational areas. Ten years ago only a minimal percentage of high schools in Wisconsin used competency-based instruction. Today the number has grown substantially and continues to increase.

One disadvantage is the possibility of the competency lists rapidly becoming outdated with changing technology. However, once the competency-based instruction is developed, it should be updated regularly.

Note: Curriculum listed on competency checklists were taken from local schools and, therefore, may not be representative of the Department of Public Instruction's model curriculum. The resources are examples of the process used to define competency-based instruction.

RESOURCE A

Sample Instructional Inventory Grid
Medium Size School District

Department: Industrial Education — Program: Metals

The course titles, grades level(s) offered, and prerequisite(s) are matched with the numbers on the grid below.

1. Course Title-Home Repair	Prerequisite(s) - None	Grade Level 8
2. Course Title-Ind. Arts 9	Prerequisite(s) - None	Grade Level 9
3. Course Title-Metals 10	Prerequisite(s) - None	Grade Levels 10-11
4. Course Title-Metals, Fab. & Weld. 11	Prerequisite(s) - Metals	Grade Levels 11-12
5. Course Title-Cap. Metal. & Weld.	Prerequisite(s) - Metals 10 & 11 & 12 sem. drafting	Grade Level 12

Key: I = Introduction **D = Developmental** **M = Master**
(Note: Master means to the extent a high school graduate could be reasonably expected to have mastered the concept)

Concepts	Course Title Number 1	2	3	4	5
I. Knowledge of Iron & Steel Industry	I	I-D	D	D	D
II. Sheet Metal					
A. Design and Planning					
1. Identify drawings	I	I-D		D	D-M
2. Use working drawings (multi-view & orthographic)	I	I-D	I-D	D	D-M
3. Identify objects by reading dimensions	I	I-D	I-D	D	D-M
4. Read snap notes			I	I-D	D-M
5. Take accurate measurements	I	I-D	I-D	D	D-M
6. Communicate by means of sketches	I	I-D	I-D	D	D-M
7. Apply drawings, measurements and dimensions to shop activities	I	I-D	I-D	D	D-M
8. Identify and use sheet metal layout equipment	I	I-D	I-D	D	D-M
9. Read blueprints			I-D	D	M
10. Understand various types of pattern development			I	D	M
11. Develop jigs & fixtures to fabricate metal			I	D	M
B. Cutting & Snapping					
1. Squaring shears	I	I-D	D	D	M
2. Shear material accurately on Wysong Power Shear				D	M
3. Hack saw		I-D	D		
4. Files	I-D	I-D	D	D	M
C. Forming					
1. Brake	I	I-D	D	D	M
2. Operate Diacro press brake				D	M
3. Fold	I	I-D	D	D	M
4. Roll	I	I-D	D	D	M
5. Bend bar stock		I-D			
6. Stretch Metal		I-D			
7. Twist Bar Stock		I-D			

Concepts	Course Title Number 1	2	3	4	5
D. Polish		I-D	D	D	M
E. Assembly					
1. Rivet joints	I	I-D	D	D	M
2. Solder joints	I	I-D	D	D	M
3. Spot weld	I	I-D	D	D	M
4. Sheet metal screws		I-D		D	M
5. Nuts & bolts		I-D			D
F. Understanding safety as it relates to cutting and sawing metal	I	I-D	I-D	D	D-M
G. Visually identify materials used in metal fab. industry			I	D	M
H. Math related to metal fabrication				I-D	M
I. Properties of sheet metal		I	I-D	D	M
J. Calculate simple bend allowance			I	D	M
III. Welding Theory and Skills					
A. Demonstrate and understand the effects of heating and cooling on the properties of steel			I	D	M
B. Correct Welding Techniques			I	D	M
C. Principals of arc welding			I-D	D	M
D. Weld following joint: Butt, Lap, T-joint, edgr					
1. Flat			I-D	D	M
2. Horizontal				I-D	M
3. Vertical				I-D	M
E. Operate oxy-acetylene welding equipment			I-D	D	M
F. Demonstrate welding and cutting skills (oxy-acetylene)				I-D	M
G. Bronze weld				I-D	M
H. Demonstrate knowledge & skill in use of MIG welding equipment				I-D	M
I. Demonstrate knowledge and skill in use of TIG welding equipment					I-D
IV. Metal Machining					
A. Engine Lathe			I	I-D	
B. Drill Press	I-D	I-D	I-D	D	M
C. Surface Grinder			I-D		
D. Metal Cutting Bandsaw			I-D	D	M
E. Milling Machine			I-D		
F. Metal Shaper			I-D		
G. Grinder		I-D	I-D	D	M
H. Power Hacksaw				I-D	
I. Iron Worker			I-D	D	D-M
V. Bench Metal					
A. Filing		I-D	I-D	D	M
B. Threading		I-D	I-D	D	M
C. Cutting		I-D	I-D	D	M
D. Finishing		I-D	I-D	D	M
VI. Careers in Metals Industry	I	I	D	D	D-M
VII. Safety Education	I-D	IDM	D-M	M	M

Worksheet
Instructional Inventory Grid

Department _____ **Program** _____

1. Course Title _____ Grade Level(s) _____ Prereq.(s) _____
2. Course Title _____ Grade Level(s) _____ Prereq.(s) _____
3. Course Title _____ Grade Level(s) _____ Prereq.(s) _____
4. Course Title _____ Grade Level(s) _____ Prereq.(s) _____
5. Course Title _____ Grade Level(s) _____ Prereq.(s) _____

Key: I = Introduction **D = Developmental** **M = Master**
(Note: Master means to the extent a high school graduate could be reasonably expected to have mastered the concept)

Concepts	Course Title Number 1	2	3	4	5

RESOURCE B

Large Urban School District Competencies

DATE: _____

	Comp.	Part Comp.	Not Comp.
METALS			
1. Measurement	_____	_____	_____
2. Bolt Discrimination	_____	_____	_____
3. Grinding (step unit 3)	_____	_____	_____
WOODS			
1. Valpar #1 (small tools)	_____	_____	_____
2. Bolt Discrimination	_____	_____	_____
3. Butt joint	_____	_____	_____
4. Step #4	_____	_____	_____
AUTO MECHANICS			
1. Step unit (unit & oil change)	_____	_____	_____
2. Valpar #1 (small tools)	_____	_____	_____
3. Valpar #9 (range of motion)	_____	_____	_____
4. Wheel cylinder	_____	_____	_____
5. Fractions	_____	_____	_____
6. Math	_____	_____	_____
7. Specifications	_____	_____	_____
8. Written exercise	_____	_____	_____
DRAFTING			
1. Crawford small parts	_____	_____	_____
2. Valpar #1	_____	_____	_____
3. Drafting project (vert. & horizontal lines)	_____	_____	_____
4. Step #1 & #3 (isometric sketch)	_____	_____	_____
GRAPHIC ARTS			
1. Layout project	_____	_____	_____
2. Paste-up	_____	_____	_____
3. Negative stripping	_____	_____	_____
4. Crawford small parts	_____	_____	_____
FOOD SERVICE			
1. Table setting	_____	_____	_____
2. Measuring cup identification	_____	_____	_____
3. Measuring cup usage	_____	_____	_____
4. Money concept	_____	_____	_____
5. Deviled egg	_____	_____	_____
BUILDING HOME MAINTENANCE			
1. Woodworking project	_____	_____	_____
2. Installing a door lock	_____	_____	_____
3. Installing a light switch	_____	_____	_____

4.	Identify related	_____	_____	_____
5.	Measuring	_____	_____	_____
6.	Hand tool usage	_____	_____	_____

CLERICAL

1.	Lessons	_____	_____	_____
2.	Recordkeeping	_____	_____	_____
3.	Filing	_____	_____	_____

CUSTODIAL SERVICES

1.	Equipment identification	_____	_____	_____
2.	Waxing a floor sequence	_____	_____	_____
3.	Cleaning material matching	_____	_____	_____

ELECTRICITY

1.	Step tape #1	_____	_____	_____
2.	Valpar #1	_____	_____	_____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

COMMENTS: _____

_____

_____

_____

_____

RESOURCE C

Small Rural School
Competency Checklist

Ninth Grade Home Economics

OBJECTIVES: Pre-requisite Competencies

The student should:

SKILLS

A. Be able to follow one step directions
B. Be attentive during class lecture
C. Have some means of recording class information
D. Be able to work independently or in groups
E. Be able to identify and use basic kitchen utensils and equipment
    1. Measuring utensils
        a. measuring spoons
        b. dry measure cups
        c. liquid measure cups
    2. Spatula
    3. Knives
    4. Cutting boards
    5. Hand beaters
    6. Bowls
    7. Sauce pans
    8. Toaster
    9. Blender
    10. Electric mixers
    11. Oven
    12. Stove
    13. Microwave

OBJECTIVES: The student will demonstrate an understanding of a variety of dairy products and their methods of preparation by:

SKILLS

A. Identifying
    1. Ice cream
    2. Cheese
    3. Yogurt
    4. Milk
        a. Nonfat dry
        b. 2%
        c. Skim
        d. Whole
        e. 1%
    5. Creams
        a. Half & Half
        b. Whipping
B. Knowing and using heat appropriately on dairy products
C. Passing an exam on identifying nutrients in dairy products
D. Making pudding using appropriate kitchen utensils and procedures, set up and clean up

OBJECTIVES: The student will demonstrate an understanding of measurements and abbreviations by:

SKILLS

A. Measuring and showing equivalents with flour and water
B. Recognizing
    1. Teaspoons (t)
    2. Tablespoons (T)
    3. Pints (pt)
    4. Quarts (qt)
    5. Gallons (gal)
    6. Pounds (lbs)
    7. Ounces (oz)
C. Completing a written or oral quiz with 75% accuracy

RESOURCE D

Technical Competency Rating Form

Student's Name _____ **Date** _____

Employer (E) _____ **Job** _____

Ratings: 3 – can perform skill without supervision.
2 – can perform skill, but requires periodic supervision.
1 – can perform skill, but not without constant supervision.

Directions: Circle appropriate rating.

Skill or Competency	Rating		
Job Knowledge - Basic Techniques			
1. Operates cash register.	3	2	1
2. Makes accurate change.	3	2	1
3. Can read a sales tax chart.	3	2	1
4. If sales tax chart is not available, knows how to compute sales tax. Can figure total amount.	3	2	1
5. Can complete cash slips.	3	2	1
6. Knows how to deal with credit cards, checks and travelers checks.	3	2	1
Quality of Work			
1. Does accurate work.	3	2	1
2. Catches own errors.	3	2	1
3. Makes correction without wasting time.	3	2	1
4. Dependable judgment.	3	2	1
5. Asks supervisor or co-worker for help, if necessary.	3	2	1
Reliability			
1. Does job with a minimum of supervision.	3	2	1
2. On time.	3	2	1
3. Accurate manipulation of time clock.	3	2	1
4. Does not take excessive break-times.	3	2	1
5. Absentee rate.	3	2	1
6. Calls in for absence or tardiness.	3	2	1
Attitude			
1. Polite to customers.	3	2	1
2. Able to handle a difficult customer.	3	2	1
3. Gets along well with co-workers.	3	2	1
4. Does not "bad-mouth" boss or co-workers.	3	2	1
5. Pleasant attitude, barely complains, smiles.	3	2	1
Appearance			
1. Neat and clean.	3	2	1
2. Wears uniform or appropriate clothing.	3	2	1

Technical Competency Rating Form

Student's Name _____ **Date** _____

Instructor (I) _____ **Job** _____

Ratings: 3 – can perform skill without supervision.
2 – can perform skill, but requires periodic supervision.
1 – can perform skill, but not without constant supervision.

Directions: Circle appropriate rating.

Skill or Competency	Rating		
Job Knowledge - Basic Techniques			
1. Operates cash register.	3	2	1
2. Makes accurate change.	3	2	1
3. Can read a sales tax chart.	3	2	1
4. If sales tax chart is not available, knows how to compute sales tax. Can figure total amount.	3	2	1
5. Can complete cash slips.	3	2	1
6. Knows how to deal with credit cards, checks and travelers checks.	3	2	1
Quality of Work			
1. Does accurate work.	3	2	1
2. Catches own errors.	3	2	1
3. Makes correction without wasting time.	3	2	1
4. Dependable judgment.	3	2	1
5. Asks supervisor or co-worker for help, if necessary.	3	2	1
Reliability			
1. Does job with a minimum of supervision.	3	2	1
2. On time.	3	2	1
3. Accurate manipulation of time clock.	3	2	1
4. Does not take excessive break-times.	3	2	1
5. Absentee rate.	3	2	1
6. Calls in for absence or tardiness.	3	2	1
Attitude			
1. Polite to customers.	3	2	1
2. Able to handle a difficult customer.	3	2	1
3. Gets along well with co-workers.	3	2	1
4. Does not "bad-mouth" boss or co-workers.	3	2	1
5. Pleasant attitude, barely complains, smiles.	3	2	1
Appearance			
1. Neat and clean.	3	2	1
2. Wears uniform or appropriate clothing.	3	2	1

RESOURCE E

Competency Record Sheets
Small Engine Repair

Students graduating from most high schools are issued a standard diploma which does not give a prospective employer or vocational-technical school instructor a clear idea of an individual's capabilities in a specific area. This certificate and rating of each student who completes a high school vocational course at the high school hopefully will serve two purposes: 1) It should give the instructor of a post-high school program an accurate estimate of an individual's skill so an educational program in a specific vocational area can be tailored to their level without unnecessary repetition. 2) It should also give the prospective employer the same accurate estimate so they know what additional training is necessary for their employee or prospective employee.

How Skill or Competency is Measured

The rating scale below attempts to evaluate performance as an employer or supervisor would evaluate it.

3 = Performs satisfactorily without assistance and/or supervision.
2 = Performs satisfactorily but requires periodic supervision and/or assistance.
1 = Performs but not without constant supervision and some assistance.
0 = Cannot perform this task satisfactorily for participation in a work environment.
– = Task not observed at time of writing.

Skills or Competencies

General Knowledge

_____ 1. Understands operating principles of a 2- and 4-cycle engine.
_____ 2. Identifies parts of an engine and relates their function.
_____ 3. Proper use of mechanical terminology.
_____ 4. Identification and proper use of tools.
_____ 5. Practices safe work habits.

Parts

_____ 1. Correctly identifies model and type number of engine.
_____ 2. Locates and compiles correct part numbers in master catalogs.
_____ 3. Compiles accurate invoice using mark-ups and discounts.

Service

_____ 1. Operates a steam cleaner.
_____ 2. Operates a cold water cleaner.
_____ 3. Tests performance of electrical system (spark test).
_____ 4. Completes a compression test.
_____ 5. Uses test dial indicator to check for straight crankshaft.
_____ 6. Services foam type air cleaner.
_____ 7. Properly adjusts carburetor (needle valves and idle screw)
_____ 8. Adjusts to proper operating RPMs
_____ 9. Tests points and condenser with test equipment.
_____ 10. Replaces and adjusts points and condenser.

_____ 11. Tests coil for amperage output.
_____ 12. Times a single cylinder engine.
_____ 13. Adjusts and sets armature air gap.
_____ 14. Sharpens mower blades.
_____ 15. Installs proper spark plug and adjusts to correct point gap.

Repairs

_____ 1. Efficiently disassembles and re-assembles an engine.
_____ 2. Installs a repair kit in a carburetor.
_____ 3. Reams and rebushes breaker point plunger.
_____ 4. Reams and rebushes valve guides.
_____ 5. Accurately uses and reads a micrometer.
_____ 6. Accurately uses telescoping hole gauges.
_____ 7. Operates valve grinder and grinds valves.
_____ 8. Grinds valve seats. Replaces valve seats.
_____ 9. Laps in valves.
_____ 10. Sets tappet clearance.
_____ 11. Deglazes cylinder
_____ 12. Resizes cylinder.
_____ 13. Measures bearing clearance with plastigauge.
_____ 14. Measures bearing clearance with go-no-go gauge.
_____ 15. Replaces oil seals.
_____ 16. Reams and rebushes crank bearings.
_____ 17. Adjusts and uses torque wrench.

RESOURCE F

Vocational Goals

Student Name _____ **Grade** _____ **Semester** _____
EEN Instructor _____ **Vocational Course** Typing A
Vocational Instructor _____

KEY: + = **Task Accomplished**
– = **Needs Additional Work**
0 = **Discontinue**

Long Term Objective: The student will demonstrate basic keyboarding skills with practical application in personal business letters and manuscript.

Short Term Objectives:

1. Basic typewriting production procedures:
   - Demonstrate effective proofreading techniques ___
   - Label symbols ___
   - Practice various correction methods ___
   - Identify syllables ___
   - Demonstrate use of word division rules ___
3. Typewriter operations:
   - Identify typewriter parts ___
   - Plan margins ___
   - Set margins ___
   - Adjust margins as necessary
   - Describe function of typewriter parts ___
4. Demonstrate proper typing techniques and positions:
   - Sit in chair, erect ___
   - Feet flat on floor ___
   - Forearms parallel ___
   - Wrists low ___
   - Eyes on copy ___
   - Quick strokes ___
   - Demonstrate mastery of keyboard service mechanisms ___
   - Type numbers with correct reach ___
   - Type letters with correct reach ___
   - Type symbols with correct reach ___
2. Basic typewriting production application:
   - Type business letters ___
   - Type personal business letters ___
   - Type small envelopes ___
   - Type large envelopes ___
   - Fold and insert letters ___
   - Type unbound manuscripts ___
   - Space unbound manuscripts correctly ___
   - Type bound manuscripts ___
   - Space bound manuscripts correctly ___
   - Type footnote page correctly ___
   - Type bibliography correctly ___
   - Type superior numbers ___
   - Type title page ___
   - Type simple columnar tables ___
   - Type a minimum of 18 words per minute with 6 errors or less ___
5. Demonstrate tabulating procedures:
   - Clear tabs ___
   - Set tabs ___
   - Demonstrate correct tab technique ___
6. Demonstate horizontal centering:
   - Insert paper ___
   - Move stops out ___
   - Clear tabs ___
7. Demonstrate vertical centering:
   - Count lines and blank lines used ___
   - Compute spacing ___

RESOURCE G

Student Achievement Chart

Student's Name: _____ **Course Title:** _____

Instructor: _____ **Date:** _____

Rating Scale:
0 = Did not have oportunity to observe
1 = Unskilled
2 = Limited Skill - requires supervision and/or practice
3 = Skilled - independent, quality work

Skill or Competency

General Knowledge Competencies:
- Know meaning of and use common carpentry terms in actual job practice ___
- Observe safety in the proper use of power and hand tools on the job ___
- Make efficient use of materials in order to limit waste ___
- Exhibit working knowledge of basic lumber charateristics (nominal sizes, defects, strengths, etc.) ___
- Differentiate and use common hardware associated with carpentry (nails, screws, glue, etc.) ___

Floor Framing:
- Square and install sill ___
- Construct built-up wood girder ___
- Lay out and install floor joists ___
- Lay subfloor ___
- Layout and construct wooden stairs ___

Roof Framing:
- Identify different roof framing styles ___
- Identify components of a roof truss ___
- Cut and install roof sheathing ___
- Prepare roof and install asphalt shingles ___
- Set batter boards and square the building lines ___
- Know and properly use measuring and layout tools (tape, squares, levels) ___

Planning, Estimating & Blueprint Reading:
- Plan and follow sequence of steps needed in actual construction ___
- Read, understand, and use blueprints (building plans) ___
- Estimate materials and supplies needed for specific jobs ___

Building Site Preparation and Layout:
- Use transit to determine grade ___
- Layout excavation and building lines ___
- Construct forms for footings ___
- Mix concrete and mortar using proper proportions ___
- Lay concrete block and identify different types ___
- Pour and finish slabs and sidewalks ___

Wall Framing:
- Layout plates for stud spacing and rough openings ___
- Identify components of a typical wall section ___
- Construct headers and frame rough openings for windows and doors ___
- Cut and install exterior sheathing, raise, plumb & brace wall sections ___

Concrete Work, Footings, Foundations, and Bricklaying:
- Identify different types of footings and foundations ___

Insulation and Interior Walls:

- Understand and use R and U valves in insulating ___
- Install rigid, blanket and blown insulation ___
- Cut and install sheetrock ___
- Tape and finish sheetrock ___

Exterior Trim and Finish:

- Install subfascia and fascia ___
- Identify, cut and install a typical boxed soffit ___
- Install windows ___
- Install jambs and hang exterior and service doors ___
- Apply finish (stain or paint) to exterior siding and trim ___

Interior Trim and Finish:

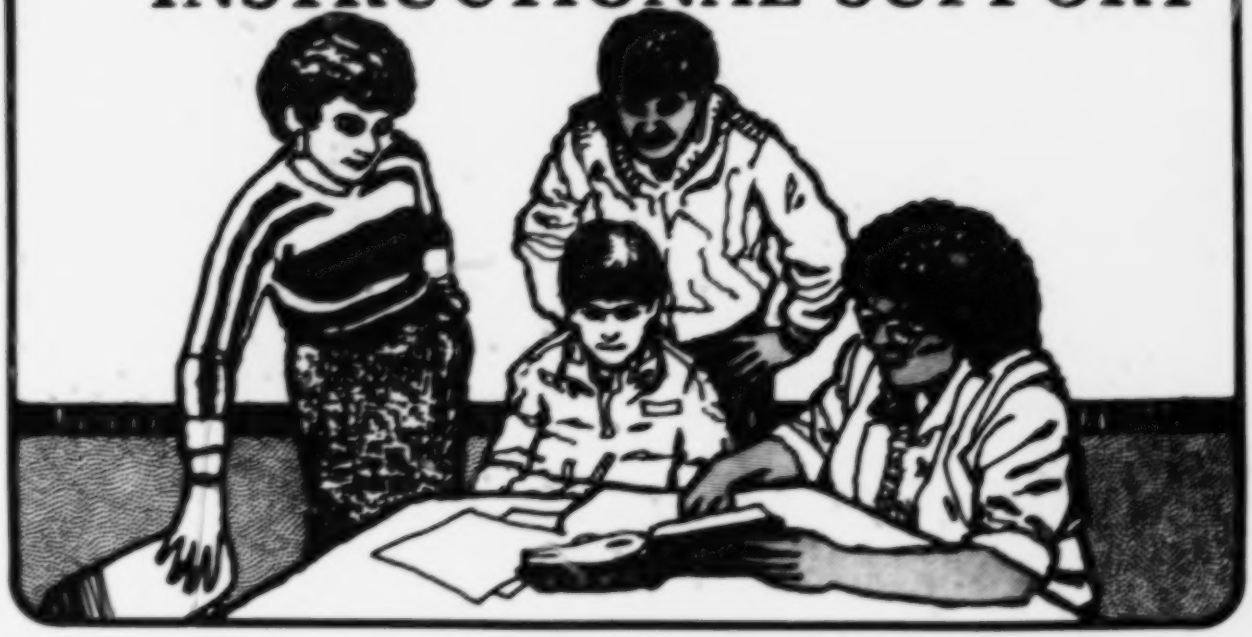
- Paint and texture drywall ___
- Assemble and install interior pre-hung doors and hardware (lock sets) ___
- Apply stain & finish to all millwork specified ___
- Cut and install base, window, and door trim ___
- Construct shelves for clothes and linen closets ___
- Install factory built cabinets and hardware and fasten tops ___

Landscaping:

- Establish finish grades ___
- Plant and install shrubs and trees ___
- Plant grass or lay sod ___

Developed for a consortium serving four schools.

SECTION EIGHT: INSTRUCTIONAL SUPPORT



INSTRUCTIONAL SUPPORT

Instructional support is a general term that encompasses a variety of techniques the DVI can use to enhance the education of students with EEN. This support, given to the EEN students and/or the vocational education teacher, may be direct or indirect. Direct support refers to working directly with students which could include active DVI participation within the vocational education classroom or parallel instruction based on the vocational curriculum. Indirect support refers to no direct student contact; for example, staff in-service or follow up of students upon leaving school. The responsibilities of the DVI and the degree of support offered will vary from class to class as determined by the DVI, vocational educator and the student(s) involved.

General Concerns

There are three general areas of expertise or knowledge needed by vocational and special educators to successfully deal with EEN students in a regular classroom or laboratory environment. These areas are in relationship to curriculum, instruction and teaching.

Curriculum essentially means what will be taught. Instruction implies how the curriculum content will be transmitted, and teaching is the direct interaction between the instructor, supporting devices, and the student. So, in short, the curriculum produces the instructional content, instruction defines how the curriculum content will be delivered, and teaching describes the relationship between students and teachers.

Vocational education curriculum is grounded in competencies necessary for occupational success. And yet all curriculums include competencies ranging from those that could be classified as "essential" to those "of limited importance". Similarly, most vocational curriculums contain competencies designed to

prepare learners to be "promotable" as well as to develop entry level skills. As a consequence, any curriculum can be adapted to accommodate a variety of job titles, learner outcomes, exit points, or post-school goals.

Once a job title, exit point, or terminal outcome has been targeted, essential competencies can be identified and become the foundation for instructional content. Unnecessary competencies and/or learning activities can be removed immediately. The inability of EEN students generally becomes most evident when focusing on unnecessary learning activities.

The ability to more adequately use existing curriculum with EEN learners also enables instructional support personnel to accurately "zero in" on what they should be teaching in conjunction with the vocational teacher. Effective curriculum usability seems to be more a matter of locating, selecting, and supporting that which you already have instead of generating something new.

The curriculum can be delivered (instruction) to EEN students in essentially two ways, first, through the development and implementation of an individualized education program (IEP) and second, through expansion of existing instructional methods in vocational education. Expansion of ongoing instructional efforts involves both broadening the current delivery system, and more appropriately using instructional support personnel. Instruction for most EEN learners in vocational education is somewhat more detailed than for the non-EEN student. However, incorporating the curriculum expansion techniques will help make instruction for all students a more meaningful experience.

Teaching or the interaction between students and instructors is a very complex process. Both teachers and students enter the vocational education instructional setting with a diversity of interests, backgrounds, and abilities. One of the most basic ground rules in teaching the EEN student is to understand that because of the uniqueness of backgrounds, interests, and abilities, each EEN learner is an individual and must be taught as such. The idea of fitting the student to the program rather than fitting the programs to the student simply does not work very well. In order to teach EEN students successfully, the program must be broad enough to allow for a variety of students to enter the system, yet specific enough to provide direct employability skills in relationship to a potential employment outcome. Teaching, then, implies how this is accomplished on a daily basis, and is somewhat separate from, but still associated with what the student should know (curriculum), and how that knowledge should be presented to the student (instruction).

Forms of Instructional Support

There are a number of forms that instructional support can take. This section of the handbook will identify some of the areas of and techniques for providing support to vocational educators or providing parallel instruction based on the vocational curriculum. It is important to keep in mind that the purpose of the DVI working in the vocational classroom is ultimately for the benefit of students with EEN. It is the role of the DVI to provide **support** to the teacher and student. The DVI is present in the vocational education classroom at the invitation of the vocational instructor. The role of the DVI and degree of participation in the vocational class will vary from class to class. The important thing is to establish a relationship which is comfortable for both the vocational teacher and the DVI and works to the benefit of the EEN student(s). While every form of instructional support mentioned in this section may not be possible to implement, the DVI should be prepared to provide such assistance with cooperation from other special education staff, if requested. A DVI engages other special education teachers in the instructional support function of the DVI concept. This increases the likelihood that all students who need support will receive it.

An obvious form of support is the DVI acting as a **team teacher**. This approach involves both joint planning of lessons and activities and joint presentations. The role of the DVI may also be to **provide other help** such as giving additional supervision, operating audio visual equipment, or writing tests. The DVI, in working with the vocational educator, may

be able to suggest instructional support methods that make the vocational curriculum more usable. The DVI can also assist with evaluation of student progress.

In some situations the DVI may assist students by giving further explanations or direct assistance on class activities or labs. In other cases, the DVI may free the vocational teacher to work individually with those students who need additional help. Either case allows for improvement of specific skill deficits of students with EEN through one-on-one or small group activity.

When first entering a vocational class, the DVI may not feel comfortable; however, just being in the classroom may serve as a way of letting the vocational teacher know the DVI is interested, willing to help, and will follow through in providing support. Being in the class and observing can also help the DVI gain a better understanding of expectations of a particular class or a specific teacher.

Some of the advantages of providing direct instructional support within a vocational class include:

- The DVI or special education teacher gains valuable knowledge about the vocational curriculum being offered.
- The vocational instructor learns strategies to effectively work with the EEN students.
- The EEN student is held accountable for class work and provided direct support as needed within the mainstream setting. Also special education stigmas are reduced or removed altogether and other students that have individual learning needs benefit from strategies offered to support EEN students.
- Lastly, a reciprocal relationship is formed between special education and vocational education that enhances communication.

The DVI may identify other appropriate instructional support opportunities just by being in the class. Working with the vocational teacher will also enable the DVI to become familiar with the instructor's teaching style which will assist them in making decisions for future mainstreaming placements.

There are many techniques which have been developed and can be used to provide instructional support. Some suggestions are summarized in Figure 5. The figure refers to major areas of support. Instructional support techniques can be grouped under the following headings:

- Classroom Organization
- Classroom Management
- Methods of Presentation
- Methods of Practice
- Methods of Testing

Additional strategies for modifying instruction for EEN students have also been identified in Figure 6. These strategies have been rated according to difficulty and provide sample teacher reaction and comments. Also listed are some reminders regarding implementation. DVI comments have been included as well.

FIGURE 5: Realistic Alternatives for a Mainstream Teacher

Classroom Organization	Classroom Management	Methods of Presentation	Methods of Practice	Methods of Testing
Vary Grouping Arrangement - large group instruction - small group instruction - individual instruction - peer tutoring - independent self-instructional activities - learning centers	Vary Grading System - homework - test - class discussion - special projects	Vary Content - amount to be learned - time to learn new information - conceptual level	Vary General Structure - amount to be practiced - time for practice - group/individual teacher directed/independent - items ranging from easy to difficult	Vary Type - verbal - written - demonstration
Vary Methods of Instruction - teacher directed - student directed - grades - free time - special activity - tangibles - progress charts	Vary Reinforcement Systems - praise - notes sent home - cues, mnemonic devices - provide immediate feedback - involve students actively	Vary General Structure - advanced organizers - previewing questions - recall with cues - recall without cues	Vary Level of Response - copying - recognition - time for completion	Vary General Structure - group/individual - amount to be tested
	Vary Rules - differentiated for some students - explicit/implicit-discussion	Vary Type - verbal—lecture - written—texts - worksheets - demonstration - audio-visuals - tape recorders - filmstrips - movies - opaque projectors - transparencies	Vary Type of Materials - worksheets - texts - audio-visual equipment	Vary Level of Response - recognition - recall with cues - recall without cues

From Laurie, T. Buchwach, Silverman, R. and Zigmond, N. "Teaching Secondary Learning Disabled Adolescents in the Mainstream." Learning Disabilities Quarterly, 1978, 1(4):62-72.

FIGURE 6
Modifications of Teaching Strategies

The following list of common modifications of teaching strategies is rated according to difficulty factor and teacher response. Also listed are reminders regarding implementation (Riegel, 1983). For this handbook, additional DVI comments have been included. The difficulty factor scale used on the Chart of Modification of Teaching Strategies is as follows:

1.0 - 1.8: relatively easy.
1.9 - 2.3: reasonable.
2.4 - 2.8: will require effort and/or cooperation.
2.9 - 4.0: difficult or very time consuming; will often call for support or assistance.

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
1. Have talented student read to student with reading difficulties.	2.2 (academic and content) 2.6 (lab and performance)	- May be embarrassing for student with low skills. - Good students may not be willing. - Space away from the rest of the class is needed to do this. - Grouped classes have few good readers. - Tapes are preferred because students can listen without taking other students' time.	- Find a private location; choose a friend or family member to do the reading. - Offer extra credit for helping student. - Request this help of students from other classes. (Consider drawing from higher grade levels.)	Modification = Team "talented" student with EEN student working together--not just reading. Can be done in resource room. College students, retired persons or other volunteers can help.
2. Have student listen to a tape recording of the test.	2.0 (content) 2.4 (lab)	- A place is needed--either a special table near an electrical outlet or a separate room. The student would have a difficulty hearing in a lab class. - Earphones would be necessary. - Takes tie to check out tapes and equipment, to say nothing of making the tapes.	- Provide extension cords or battery operated tape recorders. - Consider use of study hall time or involve parents. - Teach the student to assume the responsibility for checking out tapes - Enlist the help of the librarian or media specialist to set up a taping program. - Use student aides.	Make tape available to any student who would like to use it (less stigma for EEN student). Set up corner of room with tape recorders and head phones.
3. Provide an alternative text or workbook.	2.2 (content) 2.6 (lab)	- Availability of alternative texts is not always good. - The student will be conspicuous. - Alternate texts fail to deal with the same material with the same depth. - Extra time is needed for preparing separate assignments and discussions. - This depends on help from support personnel.	- Check local and regional SEIMCs as well as sales representatives for new material. - Consider revised study guides and worksheet. - LD students will be able to contribute more to class than they could have with a harder book, even if the book doesn't have all the same ideas.	

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
4. Read test questions aloud to students.	2.9	- The teacher needs to be available to monitor other students taking the test to prevent cheating and to answer questions. Thus a student aide or resource room teacher is requested to give the oral test. - Oral tests take longer to give. - It's embarrassing to the student. - It's distracting to the rest of the class. - The whole test could be read aloud to the whole class.	- One could seat students needing an oral test in the rear of the room, stand behind them and read the test while still surveying the class. - Establish a period during the day for students needing oral tests to make appointments for assistance - Tape the test ahead of time so it is available to students in the resource room. - Select a private location and time.	DVI could do this in separate part of vocational area. May be done in resource room. In some cases, it may be appropriate to read tests aloud to the entire class.
5. Provide written backup for oral directions.	1.8	- Use of overhead projector on class size and room size. - Write on handouts. - Post charts on walls for explaining new techniques. - Explain directions to special students individually. - This requires extra preparation time.	- Establish a permanent schedule for use of equipment. Have students deliver it. - Write key terms or ideas on board.	
6. Provide alternate media.	2.3	- For 1 to 3 students? What is the rest of the class doing? - Content is usually not equivalent. - Not available. - A separate time and location are needed. - We don't have enough A-V machines. - Lectures take less time and effort to prepare.	- An Autovance will not darken the room. Other students may use it later if they are interested, reducing the "stigma" of special treatment. - Use earphones for movies in a corner. - Use the resource room, the library, or a conference room. - Avoid Fridays; plan ahead, sign up first. - Variety in instruction is helpful.	Material may be available through VTAEs or CESAs Field trips for hands-on activities.
7. Give a demonstration.	2.2 (content) 1.6 (lab)	- Take more preparation time - Might involve extra materials. - Depends on the material.	- Remember, this doesn't have to be an everyday occurrence. - Difficult concepts might be worth the extra time. - Solicit help from other students.	The demonstration is in addition to lectures or reading.

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
8. Type worksheets.	2.1	- I don't have skill in typing. - This takes more time. - Typewriters aren't available. - We don't have enough aides or secretaries. - Too much of our work is charts, graphs, drawings, etc., which need to be done by hand.	- Check with students in typing classes who want typing experience. - Call on students who have neat and readable work to provide such drawings, even if this is for the next semester. - Legibility is the issue here not typing per se. - Check with students in graphic arts or drafting classes.	Make sure duplicated copies are legible.
9. Use films or film-strips instead of textbook.	3.0 (academic) 2.6 (performance)	- Not always available. - Not always interchangeable. - Difficult to sequence properly with text content. - Need a separate place to do this. - Difficult to do for just 1 to 3 kids. - Use media along with texts rather than as a substitute.	- Coordinate with media specialist to supply listing of materials available (by topic) within the district and at regional centers.	They are available through the vocational instructor, VTAE districts, CESAs or local businesses.
10. Pre-teach vocabulary	2.1	- Could be boring or redundant for capable students. - Time consuming to prepare and present. - Too many words and concepts to choose from.	- Be careful about assumptions. This is a short lesson. Capable students can sit quietly, contribute to discussion or or get creative work. - Consultant could present short lessons in a separate setting.	Parallel instruction in the EEN classroom.
11. Highlight student's text.	3.3	- Lack of textbooks. - Time consuming. - Providing a "key ideas" ditto is more practical.	- Seek additional funds. Ask parents whether they wish to purchase. - Use inservice time, release time or summer workshop time.	Highlighting important vocabulary in blue, important definitions in pink, and concepts in yellow. Materials highlighted could come from the questions to be answered in the chapter, or from a study guide from the content area teacher. A key to the color-coding should be provided. Helpful Hint: Aides, students, or volunteers may do actual work.

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
12. Use study guides.	2.9	- Time consuming to prepare. - Difficult because of numbers of kids. - Could be used as supplements for the text, but not as substitute.	- Time required diminishes with practice. - Compose at the typewriter. - What is the teacher's goal for the student? Study guides are helpful in teaching content.	Incorporating the use of see-through study sheets allows students to quiz themselves on any type of information and it provides immediate feedback. The procedure used is: on index cards, problems or questions are written using a dark magic marker and a water base marker for the answer. (This marker is usually pink or yellow.) When the cards are under a plastic theme cover (usually red), only the problem or question is visible, but the answer appears when the card is removed from under the plastic. Can reinforce highlighted textbook.
13. Use worksheets requiring low writing.	2.4 (content) 2.0 (lab)	- Time consuming to make up two forms of each test. - Would rather spend extra time alone with students helping them master writing skills. - These worksheets may be too difficult for low readers.	- As an alternative, try dictating items on tape. - This modification assumes good reading but poor writing. Try taping for poor readers.	
14. Accept alternate forms of information sharing (e.g., art).	2.3	- These are too "cutsie." - This doesn't work for all tasks; it depends on the material. - Students who have difficulty writing need practice, not alternatives. - Social problems arise when some are given work that is perceived as less demanding.	- Be sure the alternative selected is equivalent in terms of mastery shown and time required. Use alternatives sparingly. Don't fight a teacher's value system. - Supplement instruction in a special setting. Consider offering alternatives to all students.	
15. Have student answer test questions orally or dictate them for someone else to write.	2.5	- This requires a separate testing location as well as an aide to administer the test. - The student could write out a taped version of his own dictation. - This requires additional time. - Asking better students to help may be seen as an invasion of their rights.	- Identify an alternate location such as a resource rom, conference room or a small office. - Ask another student to help, if one objects.	

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
16. Omit assignments which require copying in a timed situation.	2.4	- Outlines, handouts or other dittos could supplement board notes, but teachers considered this too much extra work. - Teachers don't like to eliminate note-taking. - Some typing teachers are unwilling to give up the timed writing requirements, though others have done this successfully.	- Allow students to copy others' notes. - Limit the amount of material to be presented. - Leave information on the board for several days.	Don't eliminate notes but allow EEN teacher, to supplement missing information.
17. Allow a written report instead of oral.	2.0	- Teachers may be unwilling to eliminate an activity in an area in which a student needs to improve. - Teachers may want other students to hear the information presented. - Teachers hesitate to let a student avoid an activity solely on the basis of personal preference. - Teachers worry about the student's self concept.	- If oral practice is the purpose, suggest a tape or private discussion with the teacher. - Let the student read written report, or have another student read it. - Assure the teacher that the student's problem is legitimate, explain the student's disability. - Prepare the class to accept individualised assignments.	
18. Ask questions requiring short answers instead of essays.	2.0 (content) 1.5 (lab)	- It's too time consuming to make up two separate tests. - I feel that students should answer in complete sentences.	- State this rule. If the student really can't follow this rule in written form, consider another modification.	
19. Give a take-home test.	2.2	- Too time consuming to prepare. - Parents aren't always responsible to make sure the test is completed. - Wouldn't work in class requiring the use of machines. - Open notes tests in school are preferable. - I don't see any advantages to this.	- Meet with parents to establish ground rules and helpful guidelines. - With this, the student has more time.	Alternative--begin a test in content area classroom, finish in the EEN classroom.
20. Have student practice speaking in smaller groups before larger.	2.3	- Discipline may be a problem for group work. - My class would have to be reorganized around these students. - This item is unclear to me.	- Use group-building activities in preparation for the assignment. - Select another setting, such as the resource room. - Explain the nature of group processes and how they can be taught, as well as the purpose of desensitization.	Use this activity to teach listening skills to students in the small group.

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
21. Delete notetaking by using carbonized copy of another student.	**2.4**	- **The students should put forth some effort of their own.** - **This might promote inattentiveness in class for the student who doesn't have to take notes.** - **Notetaking is an important skill, and should be taught to students needing it.** - **Some teachers prefer to provide the student with notes or an outline, and have them listen in class.** - **There is a lack of talented students in remedial classes to provide notes for copying.** - **This might be perceived as an invasion of the talented student's rights.**	- **The student might turn someone else's notes into a short summary paragraph.** - **Help the teacher prepare a unit on notetaking, or teach this skill in the resource room.** - **Teach notetaking before requiring it.** - **Ask another student.**	**Use overhead to demonstrate/teach notetaking.**
22. Provide extra practice.	2.4 (academic) 1.8 (performance)	- Time consuming to provide extra practice worksheets. - When and where would students do the extra work? - Since these students often do not complete regular assignments, how can they be expected to do more? - Students don't take advantage of this when it is provided. - The course moves too rapidly for students to keep up.	- Use commercial materials for practice and drill whenever possible. Borrow worksheets from another teacher. - Resource room time, home, study hall. - Give credit or double credit for practice assignments. - Monitor carefully, so student doesn't become burdened. Consider another modification such as reducing amount.	
23. Recognition rather than total recall tests.	2.3 1.8 (lab)	- Since teachers wouldn't always want to give this type of test to all students, two tests would have to be prepared. - Too time consuming. - Depends on what is being tested.	- Refer to Study Guides and Worksheets section in Maladies and Remedies, and Development Report No. 1 from Model Resource Room Project.	Use assessment to document student is functioning at recognition level at cognition rather than recall.

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
24. Extend due date.	2.0	- Unfair to other students. - Teaches irresponsibility. - Teacher may have a policy of allowing everyone one extension per marking period. - Too much extra paper work. - Student will always be behind the rest of the class. - Group projects don't lend themselves as well to this modification.	- Suggest that the extension is set ahead of time, taking known student weaknesses into account. Should not be an emergency measure or a payoff for poor time management. - Construct a schedule showing what student will do each day; show that this is reasonable, given their disability and other class expectations. - Suggest a way to reduce extra time and paper work involved in accepting late work. - Use this technique sparingly, so work doesn't pile up.	
25. Reduce the rate of introduction of new idea.	2.9 (academic) 2.4 (performance)	- Not practical, given other students' needs. - Depends on what materials need to be located or modified. - Course objectives would then change.	- This is probably most appropriate for grouped or tracked classes. - Try providing new information and practice on a daily cycle instead of by the week . . . a little each day. - Call on support personnel and SEIMC staff.	
26. Allow student to retake tests until passed.	2.8	- Unfair to other students. - Time consuming. - Must construct new tests to avoid memorizing the test itself, and to avoid cheating. - After two times the test goes home to parents. - Appropriate for writing assignments but not tests.	- Emphasizes concept of mastery rather than competition. - Help teacher plan for scheduling and additional paper work. Use student help and resource room time. - Often it helps to just change the order of the items. - Try giving the test another way, such as orally.	Allow student to use text when retaking the test.
27. Grade on individual progress or effort.	2.1	- Hard to back up if the grade is questioned by someone else. - Progress and improvement can be graded; effort is too vague. - Class size is a problem; do this for special students only. - All students in the class must be graded on the same criterion, or students see it as unfair.	- Help teachers devise ways to help students accept individual differences. - Observable time at the task may be a criterion to use here. - Perhaps effort grades could be available for a "C" grade, but no higher.	See Resource B "Selected Alternative Grading Techniques"

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
28. **Reduce auditory distractions by keeping the room quiet.**	2.2 (content) 3.1 (lab)	- This is very difficult in lab classes where there is much movement and may be machine noise.	- Suggest ear plugs, headsets or the like.	
29. Reduce visual distractions in the room.	2.2 (content) 2.8 (lab)	- Teachers think blank walls are boring; we put time and effort into covering them. - Clear desks and tables are impossible in some lab classes.	- Explain the nature of the student's disability. Suggest a place in the room near their seat which is clear. Help student take responsibility for keeping their own desk clear. - Help student to approach this task in an organized fashion, and in a way that minimizes their own distration.	
30. Seat the student closer to the teacher.	1.6	- Could do this for certain students only. - Teacher moves around a lot. - As long as student doesn't object.	- Work with student's understanding of own disability to encourage choosing to do this.	
31. Check the student's notebook often.	2.2	- Doesn't encourage student responsibility. - Lack of class time. - This tends to side-track the lesson.	- Spot check a few every day. Limit the number of minutes spent on this task. Keep records. Not all kids will need it. - Have student check tasks completed himself; review weekly.	Check notebooks randomly. Checking one notebook a day would keep students aware, and each notebook would get checked once a month.
32. Introduce long term assignments so student knows what tasks will be expected and when.	2.1	- Requires long-range planning. - A syllabus keeps students informed. - Due dates change according to pace of each class; this modification reduces flexibility.	- Some students need specific dates for each part of an assignment in order to plan their time. Resource room teacher or parent can help if they have enough prior information. - Make dates guidelines, not deadlines. - Hand out syllabus, pencil in dates; change as necessary.	
33. Give directions in small distinct steps.	2.2 (academic) 1.7 (performance)	- Boring to rest of class.	- Complete directions could be given first so able students may begin. - Supply written directions for review at home. - Offer office hours for individual help.	
34. Give oral cues.	2.0	- Other students would chime in.	- Set ground rules for class discussion.	

MODIFICATIONS	DIFFICULTY FACTOR	COMMENTS FROM TEACHERS	CONSULTING RECOMMENDATIONS AND COMMENTS	ADDITIONAL DVI COMMENTS
35. Use worksheets which ask for specific information to be learned.	1.9	- Teachers don't like to "give the answers." - Time consuming.	- If mastery is the goal, the student shouldn't have to guess.	
36. Have student repeat directions.	1.9	- Time consuming. - Easier in a small class.	- Other students can begin work. It is more time consuming for work to be done incorrectly, and then redone.	
37. Reinforce student's recording assignments and due dates.	1.7	- Time consuming. - Too many students. - Easy to get side-tracked from lesson. - Students not responsible to remember to bring notebook.	- Seat special students near front of room. Watch them write. - Spot check. - Assign another student to remind them. - Record assignments in conspicuous place in room.	
38. Check on progress often in first few minutes of work.	2.2	- Assignments usually done outside of class time. - Too many students.	- Ask parents or peers to help. Give a ten minute start-up period during class time to prevent misunderstanding or mistakes in the beginning.	Role for DVI.
39. Ask for parent reinforcement at home.	2.3	- Time consuming to call parents. - Parents may be unwilling, or fail to follow through.	- Space out the calls, doing a few a day or a week. Ask parents to check in with teacher. Divide the task with another teacher or the special education teacher.	Send information to parents.
40. Give a reward for bringing materials to class each day.	2.7	- Time consuming. - Against teacher's philosophy. - Sets student apart from others. - This is silly, and kids know it.	- Students can be seated in groups or rows, and points given for total group responsibility (alternate groups periodically). - All students should come prepared. Perhaps a penalty is necessary for those who fail to take responsibility.	
41. Point out relationships between ideas or concepts.	2.1	- Depends on method involved; can be done while discussing text that is read orally, or during a demonstration.	- Use several different modalities when presenting.	Use on overhead.
42. Draw arrows on text or worksheet to show ideas which are related.	2.4	- Time consuming. - Don't write in textbooks.	- Use inservice time, planning periods with help from resource room teacher or teacher consultant, or seek assistance from parents for purchase of extra texts or worksheets.	

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R. Hunt Riegel, "Mainstreaming Equals Cooperative Planning," Academic Therapy, 1983, 18(3):285-298.

RESOURCE A

Some DVI Instructional Support Services
(Taken from the 1984 evaluation results--60 respondents)

- Shoulder to shoulder support in a vocational class
- Team teaching—feedback to instructor regarding a lesson
- Peer tutoring
- Use of an aide to tutor and provide parallel instructional support
- One-to-one tutoring by the DVI or other special education staff
- Review tests: determine reading level, type, revise and rewrite as needed.
- Read tests to students
- Review safety tests
- Develop study guides
- Review for tests in study groups
- Notetaking, outlining text chapers and beefing up student's vocational class notes
- Review class materials: determine appropriateness, assist vocational instructors in obtaining materials appropriate to student's ability
- Highlighting and underlining materials and textbooks
- Tape record lectures, textbooks, and shop safety rules
- Adapt academic materials/assignments; i.e., written assignments, worksheets, vocabulary flashcards, measurement cards, etc.
- Adapt or assist with grades
- Adapt course (premainstreaming in scope)
- Adapt materials to student learning style
- Resource room support of daily assignments
- Computer assisted instruction, test review questions, entry level skills for computer use
- Review of computer software
- Develop computer review files
- Prepare computer programs
- Define vocational goal on the IEP (Individual Education Plan)
- Cooperatively develop competency-based checklist and IEP goals
- Improved scheduling of students into a vocational class
- Taught parallel instructional support; i.e., prevocational skills, independent living skills, and vocabulary/basic skills needed to succeed in the vocational class
- Taught career development class and involved guidance
- Extra lab and study time for students
- Assisted vocational teacher with home-school communication
- Advise vocational teacher on instructional level and behavioral techniques
- Assisted slower students in addition to EEN
- Assisted in the evaluation of EEN students
- Established a career exploration course at the junior high school
- Follow up on teacher's suggestions for EEN students
- Follow up of EEN students leaving school

RESOURCE B

Selected Alternative Grading Techniques
(YOU DON'T HAVE TO GIVE AN F... IF YOU DON'T WANT TO)

Traditional grading poses significant problems when working with secondary learning disabled students, such as:

- a low grade reinforces failure
- grades do not describe strengths and weaknesses
- grades do not reflect each student's level of functioning

Many of these problems may be eliminated by adapting variations of traditional grading/ evaluation procedures. A variety of sources (Frierson and Pages, 1973; Friesson, 1974) suggest alternatives as follows:

1. Grade by achievement level.
   - The student is graded as above average, average, or below average on each level of functioning.
   - A variation may include student self-grading on a daily basis.
2. Grade by progress. (The level of performance is not so important as is the rate of learning.)
   - Grading is based on how much learning has occurred during a given time limit.
3. Multiple Grades. (Achievement, ability and attitude are all measured with this technique.)
   - A grade of Caa would mean the student has average achievement, has progressed further than expected for their ability, and has a good attitude with high interest.
4. Alternative Grades.
   - The pass-fail and satisfactory-unsatisfactory system may be useful.
   - The teacher may allow for one free grade to be substituted for any one grade during the quarter or semester.
5. Extra Credit.
   - Allow special projects or assignments for extra credit to improve the grade. For example: If the student makes a poor grade on a test they may be allowed a project on the same course content for credit to supplement the test score.
6. Task Mastery Grading.
   - The student must attain a certain level of mastery in order to receive a grade.
   - A contract may be set between the student and teacher prior to beginning the course of work.
7. Contract.
   - The student and the teacher agree "If you do this much you get an 'A'; for this much you get a 'B'; and for this much you get a 'C'."
   - Make a reasonable agreement.
8. Vary Test Taking Procedures.
   - The teacher may allow for oral tests, take-home tests, etc.
   - Establish the best method of test-taking for the student.
9. Student-Teacher Evaluation.
   - Both the student and teacher evaluate the progress, then cooperate in rating the progress.

10. Chart of Progress.

    - The student may keep a chart or log of progress.

11. Project Options.

    - Work-study projects in the community may be assigned when relevant to course content.

12. Bonus Concept. (The Bonus Concept is like extra credit, but it is in lieu of regular credit.)

    - If you'll bring your book every day and be on time every period, I'll give you 40 points in the final.

    - If you'll just write fifty words when I assign a theme, I'll give you a C.

13. Advance Warning System.

    - Two weeks before report cards are to be sent home, the student is given a facsimile report card with grades entered and with this admonition: "You have two weeks to do something about the grade if you don't like it."

    - Provide student with alternatives, or ways to bring that grade up.

14. Credit Grades.

    - Give the student a grade in advance, with the agreement that the work needed to make the grade will be done after report cards go out.

RESOURCE C

How SQ3R Works

S Survey Here is where you skim or survey the material. It means looking over the whole assignment **before** you actually start to read it.

1. Check the title first to get an idea of what the material is about.
2. Note the beginning and end to get a notion of how much material the author uses to get across the ideas.
3. Pay attention to headings and subheadings. They can help you get an overall picture of the author's plan.
4. Look at charts, pictures, graphs, and other illustrative material. Check the captions under each. These can help give you clues to the overall plan.
5. Quickly read any handnotes, introductory paragraphs, and summary sections. They can give you a better overview.

Q Question This is the crucial stage in personalizing the assignment, making it really yours. On a separate sheet of paper, jot down the questions that you, personally, want answered. What might the author be able to tell you about the topic that you don't already know? What are **you** curious about here? Sometimes, turning the headings and subheadings into questions helps.

R Read Now you are ready to actually read the assignment.

1. Read the introductory paragraphs rather carefully.
2. Add to your personal list of questions if you need to.
3. Skim the less important points.
4. Add difficult words to your question sheet so that you can verify the meanings later.
5. Keep asking yourself: What is the author's main purpose in writing this material?

R Review After you have completed the reading, try to remember each section. What was the author's main purpose? What were the chief points? What was the overall plan? Try to keep the key points in mind.

R Recite One of the best ways of understanding anything is to tell it to someone else in your own words. At this final stage, "tell" your answers to the questions, either to yourself in writing or to another student in conversation. Making a synopsis or summary (which includes answers to your questions) is also a powerful learning method.

From: Devine, Thomas G. Teaching Study Skills. Boston: Allyn & Bacon, 1961.

RESOURCE D

Teacher-Made Tests For Mainstreamed Students

Test Appearance

1. Copies should be distinct, clean, clear (Some students are "purple blind")

2. Ample margins and spacing

   a. 1½" border at top and bottom
   b. 1" border on each side
   c. minimum of 2 spaces between questions

3. Multiple choice alternatives should be placed vertically

   Original:

   What is the most effective agent of erosion? a) waves and currents b) glaciers c) percolating groundwater d) runoff

   Revised:

   What is the most effective agent of erosion?

   a. waves and currents
   b. glaciers
   c. percolating groundwater
   d. runoff

4. PROOFREAD

Test Format

1. Capitalize and underline words such as ALWAYS, NEVER, NOT
2. Alternatives to multiple-choice answers should be brief
3. Avoid negatively-stated questions, especially in T-F
4. No more than 10 items on matching lists
5. Provide short-answer alternatives if you want them to be spelled correctly
6. Avoid tricky items—they invalidate your test and increase test anxiety

Test Length and Variety

1. Allow plenty of time if you want your test to be valid (ask a colleague to take it and then triple their time)
2. Some students may require test to be read aloud
3. Use at least 3 question formats on a major unit test

Test Readability

1. Eliminate unnecessary words, especially in multiple-choice
2. Use synonyms when possible
3. Use shorter sentences
4. Keep the vocabulary terms that the students should know, but make sure that they can read them on sight

The following fifteen (15) check points should be used to evaluate the effectiveness of your tests:

	YES	NO	MAYBE
1. Are they clear and easy to read?	☐	☐	☐
2. All typo's have been corrected.	☐	☐	☐
3. There is double-spacing between items.	☐	☐	☐
4. Margins are wide (2").	☐	☐	☐
5. Answers for multiple choice questions are vertical rather than horizontal.	☐	☐	☐
6. Difficult vocabulary/wordiness is avoided.	☐	☐	☐
7. **Except, none, any, all** are underlined to draw the student's attention.	☐	☐	☐
8. Multiple choice answers are brief.	☐	☐	☐
9. Negative, partially true or false questions are absent.	☐	☐	☐
10. Short answer questions may be answered with a word, number, or phrase.	☐	☐	☐
11. Lists for matching are limited to 10.	☐	☐	☐
12. Answers for matching are on the right in alphabetical or chronological order.	☐	☐	☐
13. A variety of question types is available.	☐	☐	☐
14. Time is given so that even the slowest student can complete the test.	☐	☐	☐
15. The reading level of the test is the level of most readers in the class.	☐	☐	☐

This checklist is paraphrased from Teaching Content Area Reading Skills, Frogan and Mangrum.

RESOURCE E

Tips on Instructional Support

1. Vocational instruction should focus on the skills and knowledges students need in order to do a specific job. Use a task analysis to determine what is essential. Write your objectives to develop these essential skills and knowledges. A test question for all content is "Does the student need to know or be able to do this in order to perform on the job?"

2. Know the skill and ability of your students.

3. Begin each day with a general briefing for the total class. A review of yesterday's lecture or skills may be helpful.

4. Set aside time each week for students to catch up.

5. Keep all input short and clear. Don't go ahead until you have received feedback from the students that they understood previous lessons, demonstration or skill.

6. Lecture should be broken up into five to ten minute segments.

7. If a demonstration involves a small manipulation that only a few students can see, it is better to repeat it for a few students at a time.

8. Audio-visual aids are most effective when kept short.

9. Always feel free to stop any form of audio-visual at any point to clarify or reinforce.

10. When a text is too difficult, the material should be reduced and simplified on study sheets.

11. Tests do not need to be paper and pencil tests. They may be given orally and answered orally.

12. Repeat concepts or skill in different ways; using lectures, audio-visuals, demonstration, etc.

13. Use student tutors when possible.

14. Set up individual projects based on the student's ability. Perhaps let them choose one from two or three you choose.

15. Label tools and equipment in your room to familiarize students with the name and spelling of the work piece.

Tips for the Teacher Working with Students Who Have Learning Disabilities

A. Instructional Considerations:

1. Adjust the quantity of work, i.e., fewer math problems, fewer pages to read, etc., to the student's working speed.
2. Break assignments down into very short tasks.
3. Gradually increase the number of problems or length of tasks as the student demonstrates ability to attend longer.
4. Cut down amount of material on the page: the student may do better with a series of individual questions, each on its own page.
5. Include only that material which is absolutely necessary for them to learn.
6. Check or underline textbook passages which contain the most important facts—use markers to tell them where to start or stop an assignment.
7. Give them specific questions to guide their reading, showing them the exact paragraphs where information can be found.
8. Establish a few realistic goals.
9. Take up the student's work as soon as it's completed.
10. Keep the number of practice items on any skill to a minimum.
11. Give them a longer time than other class members to complete assignments.
12. Alternate tasks that are difficult and those that are more relaxing.
13. Let them work at reading and writing assignments for short periods—ten or fifteen minutes, depending on ability to concentrate—followed by other types of activities for short periods of time.
14. Establish a specific schedule so they know what to expect.
15. Keep work periods short; gradually lengthen them as students begin to cope.
16. Make certain they understand direction of assignments, read important directions and essential material to them, drill them orally on what they need to know.
17. Change activities **before** the student's attention is gone; watch for early signs of attention loss.
18. Provide options for obtaining and reporting information--tapes, interviews, reading, experience, making something, etc.
19. Have frequent, even if short, one-to-one conferences with students; help them to restate what they are responsible for and assess their progress toward completion of work.

Tips for the Teacher Working with Students Who are Mildly Handicapped

A. Instructional Considerations

1. Know the students' strengths and weaknesses and teach through their strengths.
2. Present material in small sequential steps.
3. Use several short learning periods; this is more effective than having one long period.
4. Review the same concepts using a variety of materials and approaches.
5. Help the student see how they can use the skills gained in class in their daily life.
6. Use a multi-modality approach whenever possible.
7. Include realistic practices; students learn by doing rather than reading or hearing about it.
8. Present tasks in a clear, concise manner to increase the success potential of the student.
9. Present real items, then photos, then drawings, and then word representations of an item when helping the students see the relationship between real items and representations of them.
10. Use multiple presentations of a concept to promote over-learning and assure long and short term retention.

B. Material Consideration

1. Use concrete objects whenever possible to illustrate abstractions.
2. Practice on realistic materials so skills are more easily transferred.
3. Present materials at students' readiness levels, while respecting their chronological age.
4. Look for high-interest low-level materials.
5. Use highlight pens, obvious colored margins, or sheets with cut out windows to help the student screen out extraneous visual stimuli and to focus their attention on relevant stimuli.

For Auditory Learners:

1. Have students drill aloud to themselves or to another student.
2. Dictate information to a recorder (another student) or into a tape recorder.
3. Have another student read important information to LD students.
4. Have students read important information aloud to themselves or to another student.
5. Have students repeat or summarize material to themselves silently.
6. Have students repeat words aloud (or silently) while writing them down on paper to keep from leaving out words or phrases.

For Visual Learners:

1. Have students write down notes and memos to themselves concerning important words, concepts, ideas.

C. Material Considerations

For Auditory Learners:

1. Give verbal as well as written directions in assignments.
2. Tape important reading and essential information materials for students to listen to as they read a passage.
3. Put assignment direction on tape so that students can replay them when needed.
4. Give students oral rather than written tests.
5. Let student drill on essential information using tape recorder, reciting information into recorder and playing it back.
6. Use published tapes with students.

D. Environmental Considerations

1. Permit students to do their work in a quiet, uncrowded corner of the room or even in the hall outside the room if they choose to. However, do not isolate them against their will.
2. Place students close to the teacher for more immediate help when they need it.
3. Place them next to a student who can help them when needed.
4. Separate them from students who are most likely to distract them.
5. Let them choose the area of the room where they can concentrate best.

RESOURCE F

Vocational Classes	Accommodations, Curricular Modifications	Follow-up Monitoring Procedures Parallel Instructions

Form developed by Marv Wurth 1984

RESOURCE G

Evaluation of Alternative Learning Situations

Content Area: _____ **Content Specialists:** _____

Modifications evaluated for: (student's name) _____

Date: _____

Directions: Review the following categories and the specific suggestions made for modifications of the learning environment.

Indicate with a check mark (√) whether you feel they are realistic options, unrealistic options for altering the learning environment in your class.

Some suggestions may not be applicable to your content area. Please indicate this also with a check mark.

In addition, indicate the effectiveness of modifications you have tried with a + or – on the evaluation form.

Key:
1. **Not applicable**
2. **Realistic Option**
3. **Unrealistic Option**
4. **Evaluation**

Space and Facility Accommodations to Physical Impairment	1	2	3	4	+	–
1. good lighting	☐	☐	☐	☐	+	–
2. back up safety equipment	☐	☐	☐	☐	+	–
3. modified chairs	☐	☐	☐	☐	+	–
4. modified furniture	☐	☐	☐	☐	+	–
5. modified water fountains	☐	☐	☐	☐	+	–
6. modified telephones	☐	☐	☐	☐	+	–
7. adequate storage	☐	☐	☐	☐	+	–
8. adequate evaluation and entry ways for wheelchairs	☐	☐	☐	☐	+	–
9. amplification devices	☐	☐	☐	☐	+	–
10. partitioned areas for small groups	☐	☐	☐	☐	+	–
11. easy access to washrooms, lunch rooms, etc, for visually or orthopedically impaired	☐	☐	☐	☐	+	–
12. adequate room size	☐	☐	☐	☐	+	–
13. flexibility of space	☐	☐	☐	☐	+	–
14. room treated for sound control	☐	☐	☐	☐	+	–
Teacher-Learning Setting						
1. set up areas for one-on-one instruction	☐	☐	☐	☐	+	–
2. have reference books, dictionaries, encyclopedias, and outside reading materials available	☐	☐	☐	☐	+	–

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Teacher-Learning Setting (continued)	1	2	3	4	+	–
3. learning centers with materials, activities, books, projects, or unit related subjects available	☐	☐	☐	☐	+	–
4. carrels or designated cubes for learning centers	☐	☐	☐	☐	+	–
Materials						
1. syllabus	☐	☐	☐	☐	+	–
2. course outline	☐	☐	☐	☐	+	–
3. contracts	☐	☐	☐	☐	+	–
4. calculators	☐	☐	☐	☐	+	–
5. desk charts	☐	☐	☐	☐	+	–
6. time lines	☐	☐	☐	☐	+	–
7. maps	☐	☐	☐	☐	+	–
8. answer keys	☐	☐	☐	☐	+	–
9. subject notebooks or folders	☐	☐	☐	☐	+	–
10. audio visual equipment	☐	☐	☐	☐	+	–
a. filmstrips	☐	☐	☐	☐	+	–
b. projectors	☐	☐	☐	☐	+	–
c. overheads	☐	☐	☐	☐	+	–
d. tapes/recorders	☐	☐	☐	☐	+	–
Classroom Management						
1. discussing topics in small groups	☐	☐	☐	☐	+	–
2. informal classes allowing more freedom "getting into people rather than subject"	☐	☐	☐	☐	+	–
3. highly selective choice of teachers	☐	☐	☐	☐	+	–
4. alternative approach to classes or mini classes	☐	☐	☐	☐	+	–
5. given written as well as oral directions	☐	☐	☐	☐	+	–
a. written on chalkboard	☐	☐	☐	☐	+	–
b. written on calendar	☐	☐	☐	☐	+	–
c. written on course outline	☐	☐	☐	☐	+	–
6. use structure	☐	☐	☐	☐	+	–
7. include movement in learning activities	☐	☐	☐	☐	+	–
8. eyeball to eyeball contact	☐	☐	☐	☐	+	–
9. be sensitive to moods of the class	☐	☐	☐	☐	+	–
10. student's desk be free of all materials except that being worked on	☐	☐	☐	☐	+	–
11. allow a break during long talky classes	☐	☐	☐	☐	+	–
12. reinforce skills learned	☐	☐	☐	☐	+	–
13. realistic assignments, step-by-step amount	☐	☐	☐	☐	+	–
14. tailor goals to get small success at first, then increase demands gradually	☐	☐	☐	☐	+	–
15. permit students to work in a quiet, uncrowded room, corner of room, in hall	☐	☐	☐	☐	+	–

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

	1	2	3	4	+	−
Social Environment						
1. allow a break during long talky classes	☐	☐	☐	☐	+	−
2. counseling to encourage better self concepts	☐	☐	☐	☐	+	−
3. involvement in art, music, lab courses, industrial arts, and automotive shop courses.	☐	☐	☐	☐	+	−
4. field trips	☐	☐	☐	☐	+	−
5. focus on students' interests	☐	☐	☐	☐	+	−
6. counsel parent and students	☐	☐	☐	☐	+	−
Control of and Responsibility for Environment						
1. discussion topics in small groups	☐	☐	☐	☐	+	−
2. alternative approach and mini classes	☐	☐	☐	☐	+	−
3. informal classes allowing more freedom, "getting into people rather than subject"	☐	☐	☐	☐	+	−
4. arrange a work-study program to give meaningful experience plus self worth via a job	☐	☐	☐	☐	+	−
5. participation from outside organizations that correlate with subjects and/or topics: Scouts, Big Brother, senior citizens, church	☐	☐	☐	☐	+	−
6. changing pitch of voice when emphasizing important points	☐	☐	☐	☐	+	−
7. make available extra activities and reading materials to keep students busy when control or structure is needed	☐	☐	☐	☐	+	−
8. provide quiet times	☐	☐	☐	☐	+	−
9. use structure	☐	☐	☐	☐	+	−
10. be consistent	☐	☐	☐	☐	+	−
11. include movement in learning activities	☐	☐	☐	☐	+	−
12. eyeball to eyeball contact	☐	☐	☐	☐	+	−
13. be sensitive to the moods of the class	☐	☐	☐	☐	+	−
14. seat auditory or visual problems in front of the room	☐	☐	☐	☐	+	−
15. student's desk be free of all materials except that being worked on	☐	☐	☐	☐	+	−
16. watch for early signs of attention loss	☐	☐	☐	☐	+	−
17. encourage courses with learning by doing	☐	☐	☐	☐	+	−
Curriculum Content						
1. charts, graphs, time and/or number line	☐	☐	☐	☐	+	−
2. select books of high interests, lower vocabulary or grade level	☐	☐	☐	☐	+	−
3. obtain outlines, checklists, etc. of other subject areas for reference and coordinating programs	☐	☐	☐	☐	+	−
4. use programmed materials	☐	☐	☐	☐	+	−

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Curriculum Content (continued)	1	2	3	4	+	-
5. basically follow a textbook or curriculum guide but use more than one level or set of textbooks in heterogeneous classes	☐	☐	☐	☐	+	-
6. specify content for particular students; use several levels of textbooks and other instructional materials; define task sequences carefully; assess students individually and enter into instruction at appropriate level	☐	☐	☐	☐	+	-
7. let student interest guide selection of significant portion of content; program for each student sequenced according to evaluation of previous performance and achievement; integrate specific tasks across broader domains of curriculum	☐	☐	☐	☐	+	-
Degree of Structure						
1. be consistent	☐	☐	☐	☐	+	-
2. provide quiet times	☐	☐	☐	☐	+	-
3. maintain orderly atmosphere	☐	☐	☐	☐	+	-
4. be prepared and have good organization	☐	☐	☐	☐	+	-
5. have materials and books to be used close at hand	☐	☐	☐	☐	+	-
6. outline goals and objectives to be completed daily	☐	☐	☐	☐	+	-
7. require students to use a subject notebook or folder	☐	☐	☐	☐	+	-
8. leave materials in the room for convenience	☐	☐	☐	☐	+	-
9. keep track of assignments, materials, projects, activities	☐	☐	☐	☐	+	-
10. collect student's work as soon as it is completed	☐	☐	☐	☐	+	-
a. permit students to have a folder in the room for assignments	☐	☐	☐	☐	+	-
b. make corrections or monitor assignments for immediate feedback	☐	☐	☐	☐	+	-
c. keep the number of practice items on any skill to a minimum	☐	☐	☐	☐	+	-
11. change activities						
a. watch for early signs of attention loss	☐	☐	☐	☐	+	-
b. plan for a variety of activity choices	☐	☐	☐	☐	+	-
c. use learning centers or activity tables to initiate activity	☐	☐	☐	☐	+	-
Instructional Methods						
1. oral reports	☐	☐	☐	☐	+	-
2. written reports	☐	☐	☐	☐	+	-
3. written or visual displays	☐	☐	☐	☐	+	-
4. charts, graphs, time and/or number lines	☐	☐	☐	☐	+	-
5. tape or film report	☐	☐	☐	☐	+	-

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instructional Methods (continued)	1	2	3	4	+	-
6. give reports to small study groups; have group members rate a report with teacher designed checklist	☐	☐	☐	☐	+	-
7. discuss topics in small groups	☐	☐	☐	☐	+	-
8. use note cards to write brief reports for organization	☐	☐	☐	☐	+	-
9. compose a series of captioned illustrations as an adaptation of a written report	☐	☐	☐	☐	+	-
10. have students prepare mini lessons for young children (students can create for young children)	☐	☐	☐	☐	+	-
a. pre-primers	☐	☐	☐	☐	+	-
b. maps	☐	☐	☐	☐	+	-
c. story collections and poems	☐	☐	☐	☐	+	-
d. small shows depicting historical events	☐	☐	☐	☐	+	-
11. provide a variety of step-by-step assignments that are realistic	☐	☐	☐	☐	+	-
a. models	☐	☐	☐	☐	+	-
b. demonstrations, unusual materials, news clippings, editorials, columns, MAD magazines, cartoons, song lyrics	☐	☐	☐	☐	+	-
c. diagrams	☐	☐	☐	☐	+	-
d. tapes and earphones	☐	☐	☐	☐	+	-
e. slides	☐	☐	☐	☐	+	-
f. oral presentations	☐	☐	☐	☐	+	-
g. mobiles	☐	☐	☐	☐	+	-
h. written outlines of reading assignments	☐	☐	☐	☐	+	-
i. filmstrips	☐	☐	☐	☐	+	-
j. record answers on cassettes	☐	☐	☐	☐	+	-
k. file card	☐	☐	☐	☐	+	-
l. overhead with transparencies	☐	☐	☐	☐	+	-
12. break down complicated tasks into step-by-step procedures	☐	☐	☐	☐	+	-
13. alternate approach or mini classes	☐	☐	☐	☐	+	-
14. be highly selective in choice of teachers	☐	☐	☐	☐	+	-
15. give shorter assignments	☐	☐	☐	☐	+	-
16. give alternative reading books of high interests, lower vocabulary or grade level	☐	☐	☐	☐	+	-
17. give assignments to parents in advance	☐	☐	☐	☐	+	-
18. provide a set of books for at home study	☐	☐	☐	☐	+	-
19. teach via "problem solving" approach	☐	☐	☐	☐	+	-
20. simplify demands so they can be accomplished	☐	☐	☐	☐	+	-
21. teach technique of skimming	☐	☐	☐	☐	+	-
22. teach reading to answer specific questions using chapter headings, table of contents, etc.	☐	☐	☐	☐	+	-
23. introduce preface, table of contents, summaries	☐	☐	☐	☐	+	-
24. teach phrasing to speed up reading by thought grouping	☐	☐	☐	☐	+	-

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instructional Methods (continued)	1	2	3	4	+	–
25. don't force reading aloud	☐	☐	☐	☐	+	–
26. summarize what has been read aloud immediately after student finishes reading.	☐	☐	☐	☐	+	–
27. encourage verbal discussions and recall	☐	☐	☐	☐	+	–
28. pre-teach any special subject vocabulary, i.e., in language, biology, geometry, social studies, math	☐	☐	☐	☐	+	–
29. try to relate information (dates and places) to significant personal facts of student's life	☐	☐	☐	☐	+	–
30. write checklists of instructions for step-by-step process in science, math, etc.	☐	☐	☐	☐	+	–
31. use programmed materials, add written reinforcement of recall	☐	☐	☐	☐	+	–
32. provide reminder checklists	☐	☐	☐	☐	+	–
33. slow down words spoken in sequence	☐	☐	☐	☐	+	–
34. re-explain complicated ideas and watch for confusion	☐	☐	☐	☐	+	–
35. make a transparency to illustrate an idea	☐	☐	☐	☐	+	–
36. prepare a glossary of words and their definitions	☐	☐	☐	☐	+	–
37. prepare a chart or map showing information	☐	☐	☐	☐	+	–
38. adapt the information for a simple play or skit	☐	☐	☐	☐	+	–
39. make a collage or picture sequence related to the assignment	☐	☐	☐	☐	+	–
40. construct a bulletin board display	☐	☐	☐	☐	+	–
41. construct a showcase or display	☐	☐	☐	☐	+	–
42. write or tape a news commentary on a subject related to the assignment	☐	☐	☐	☐	+	–
43. interview someone who is knowledgeable about the topic under study and record it	☐	☐	☐	☐	+	–
44. arrange guest speakers for presentations to the group on a related subject	☐	☐	☐	☐	+	–
45. keep a journal of new information or goals learned in the assignment or unit of assignments	☐	☐	☐	☐	+	–
46. prepare a slide, filmstrip, video tape presentation for the class	☐	☐	☐	☐	+	–
47. take photographs of subject and or topic and present as lecture	☐	☐	☐	☐	+	–
48. compile book lists on subject and/or topic	☐	☐	☐	☐	+	–
49. have students purchase their own textbooks and then underline key words or phrases	☐	☐	☐	☐	+	–
50. do a vocational or "helpful hints" chart for display in the room						
a. symbols of math: x = + –	☐	☐	☐	☐	+	–
b. symbols of science	☐	☐	☐	☐	+	–
c. symbols of social studies	☐	☐	☐	☐	+	–
d. symbols of music, art, etc.	☐	☐	☐	☐	+	–
e. parts of speech, vowels, blends, etc.	☐	☐	☐	☐	+	–

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instructional Methods (continued)	1	2	3	4	+	-
51. prepare a game for group activity or one to one participation	☐	☐	☐	☐	+	-
52. provide an outline for the student and have student initial spaces on the outline to show they have found key points mentioned	☐	☐	☐	☐	+	-
53. assign a study buddy to help with directions or class assignments	☐	☐	☐	☐	+	-
54. give written as well as oral directions						
a. written on chalk board	☐	☐	☐	☐	+	-
b. written on calendar	☐	☐	☐	☐	+	-
c. written on course outline	☐	☐	☐	☐	+	-
55. emphasize important points by:						
a. color coding	☐	☐	☐	☐	+	-
b. underlining, highlighting important passages	☐	☐	☐	☐	+	-
c. visual stimuli, i.e., models, transparencies, etc.	☐	☐	☐	☐	+	-
56. allow students to use:						
a. calculators	☐	☐	☐	☐	+	-
b. desk calendars, charts	☐	☐	☐	☐	+	-
c. time lines	☐	☐	☐	☐	+	-
d. maps	☐	☐	☐	☐	+	-
e. answer keys (to correct mistakes)	☐	☐	☐	☐	+	-

Instruction Method	1	2	3	4	+	-
Shorten requirements for completion of assignments						
1. If student is primarily an auditory learner, adjust mode of presentation by:						
a. giving verbal as well as written directions	☐	☐	☐	☐	+	-
b. taping important reading material for students to listen to as they read a passage; tape only essential information--keep it short; teacher or student can do taping	☐	☐	☐	☐	+	-
c. putting assignment directions on tape so student can use them when needed	☐	☐	☐	☐	+	-
d. give students oral rather than written tests	☐	☐	☐	☐	+	-
e. reciting information into a recorder and playing it back as a student drill exercise	☐	☐	☐	☐	+	-
f. using published audio tapes with students	☐	☐	☐	☐	+	-
g. having students drill aloud to themselves or other students	☐	☐	☐	☐	+	-
h. dictating information to a recorder (such as tests—students can record answers)	☐	☐	☐	☐	+	-
i. having students read important information aloud to themselves or to another student	☐	☐	☐	☐	+	-

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instruction Method (continued)	1	2	3	4	+	-
j. having another student read important information to students	☐	☐	☐	☐	+	-
k. having students re-auditorize silently, vocalizing material inside their heads	☐	☐	☐	☐	+	-
l. having students repeat words aloud (or silently) while writing them down on paper to keep from leaving words or phrases out	☐	☐	☐	☐	+	-
m. having student close eyes and try to hear words or information, repeating to themselves in order to block distraction	☐	☐	☐	☐	+	-
2. If the student is primarily a visual learner, adjust mode of presentation by:						
a. having students use flash cards printed in bold color	☐	☐	☐	☐	+	-
b. color coding tools and implements in industrial arts and home economics	☐	☐	☐	☐	+	-
c. in written directions, using pictures and color code the directions to the pictures	☐	☐	☐	☐	+	-
d. providing visual cues on chalkboard for all verbal directions	☐	☐	☐	☐	+	-
e. having students write notes and memos to themselves of important words, concepts, ideas	☐	☐	☐	☐	+	-
f. assigning problems in smaller clusters	☐	☐	☐	☐	+	-
g. using graph paper for spacing math problems or handwriting samples	☐	☐	☐	☐	+	-
h. taping reading lessons	☐	☐	☐	☐	+	-
i. having other students read lessons	☐	☐	☐	☐	+	-
j. giving test orally--on tape--or have student dictate answers	☐	☐	☐	☐	+	-
k. adapting lessons to student's strongest mode of learning and consult the resource teacher	☐	☐	☐	☐	+	-
l. stressing important facts rather than minor details	☐	☐	☐	☐	+	-
m. rewrite lessons to student's reading level	☐	☐	☐	☐	+	-
n. taping written material, outlines, requirements	☐	☐	☐	☐	+	-
o. limiting number of concepts to be mastered	☐	☐	☐	☐	+	-
p. presenting copies of your class notes to teachers and students	☐	☐	☐	☐	+	-
q. reducing reading level of materials when ordering new budget items	☐	☐	☐	☐	+	-
r. having individual criteria on tests	☐	☐	☐	☐	+	-
s. allowing class assignments to be completed in resource room	☐	☐	☐	☐	+	-
t. developing regular meeting dates with resource teachers to develop strategies	☐	☐	☐	☐	+	-
u. communicating sufficient information to resource teachers to allow for pre-teaching within resource room	☐	☐	☐	☐	+	-

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instruction Method (continued)	1	2	3	4	+	−
v. designing program for pacing subject matter	☐	☐	☐	☐	+	−
w. allowing oral testing by the resource teacher	☐	☐	☐	☐	+	−
x. developing a contract system	☐	☐	☐	☐	+	−
y. using supplemental texts and assignments	☐	☐	☐	☐	+	−
z. complimenting success, good behavior, etc	☐	☐	☐	☐	+	−
aa. shortening lengthy assignments	☐	☐	☐	☐	+	−
bb. providing alternative assignments	☐	☐	☐	☐	+	−
cc. giving assignments in small clusters—5 on one page, 5 on another	☐	☐	☐	☐	+	−
dd. placing acting-out students near model	☐	☐	☐	☐	+	−
ee. using peer tutoring, where each student has opportunity to exhibit strengths	☐	☐	☐	☐	+	−
ff. subdividing tasks into small sequences	☐	☐	☐	☐	+	−
gg. presenting directions orally and written	☐	☐	☐	☐	+	−
hh. allowing student to repeat directions with immediate recall	☐	☐	☐	☐	+	−
ii. allowing student to leave work in the room in their folder	☐	☐	☐	☐	+	−
jj. being willing to accept the best effort of that student as acceptable	☐	☐	☐	☐	+	−
3. Adjust grouping for the student by matching student with a peer helper who can assist them in the following ways:						
a. making sure they understand directions of assignments and activities	☐	☐	☐	☐	+	−
b. reading important directions and essential materials to them	☐	☐	☐	☐	+	−
c. drilling them orally on what they need to know: tables, parts of speech, capitals, etc.	☐	☐	☐	☐	+	−
d. summarizing orally important textbook passages for them	☐	☐	☐	☐	+	−
e. writing down answers to tests and assignments for them	☐	☐	☐	☐	+	−
f. assigning joint assignments	☐	☐	☐	☐	+	−
g. having small work groups of 3 or 4 members including student, hold all members of group responsible for making certain that each group member completes assignments successfully	☐	☐	☐	☐	+	−
4. assignments be realistic	☐	☐	☐	☐	+	−
5. modify grading or reading assignments and reports in all subjects	☐	☐	☐	☐	+	−

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

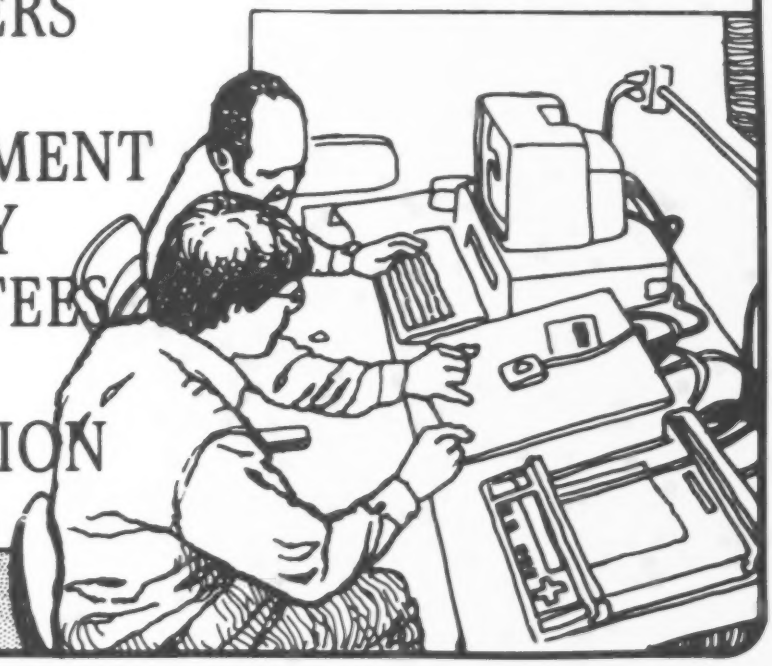
Instruction Method (continued)	1	2	3	4	+	−
Rate of Learning						
1. lesser amounts						
a. fewer problems	☐	☐	☐	☐	+	−
b. fewer pages to read	☐	☐	☐	☐	+	−
c. fewer questions to answer	☐	☐	☐	☐	+	−
2. break assignments down into short tasks						
a. present one problem at a time	☐	☐	☐	☐	+	−
b. short assignment with immediate feedback	☐	☐	☐	☐	+	−
c. cut problems or questions to one or two to a page	☐	☐	☐	☐	+	−
d. do every other problem or question on a page	☐	☐	☐	☐	+	−
3. assignments should include only that material which is absolutely necessary for them to learn						
a. integrate skills needed for daily living	☐	☐	☐	☐	+	−
b. provide a choice of interests	☐	☐	☐	☐	+	−
4. check or underline textbook passages which contain most important facts						
a. mark where to begin and where to stop	☐	☐	☐	☐	+	−
b. use hi-lite markers	☐	☐	☐	☐	+	−
5. give specific questions to guide their reading						
a. show exact paragraphs where information can be found	☐	☐	☐	☐	+	−
b. number paragraphs	☐	☐	☐	☐	+	−
c. point out key words and their meanings; words in italics	☐	☐	☐	☐	+	−
6. establish a few modest goals						
a. develop them with the students	☐	☐	☐	☐	+	−
b. develop a contract	☐	☐	☐	☐	+	−
c. grade or credits given when goals are achieved	☐	☐	☐	☐	+	−
7. adjust work time for student						
a. give the student longer time to complete the assignment	☐	☐	☐	☐	+	−
b. let the student work at reading and/or writing assignments for short periods of time, depending upon their ability to concentrate, followed by other types of activiites for short periods of time	☐	☐	☐	☐	+	−
c. structure the setting for the student; set up a specific schedule	☐	☐	☐	☐	+	−
d. keep work periods short and gradually lengthen them as the student begins to cope	☐	☐	☐	☐	+	−
e. alternate quiet and active work activities	☐	☐	☐	☐	+	−
8. assignments should be realistic						
Evaluation						
1. oral reports and tests	☐	☐	☐	☐	+	−
2. written or visual reports	☐	☐	☐	☐	+	−

Key: 1 Not applicable
2 Realistic Option
3 Unrealistic Option
4 Evaluation

Instruction Method (continued)	1	2	3	4	+	–
3. written or visual displays	☐	☐	☐	☐	+	–
4. charts, graphs, time lines, number lines	☐	☐	☐	☐	+	–
5. tape or film report	☐	☐	☐	☐	+	–
6. give reports to all study groups and have group members rate a report with a teacher designed checklist	☐	☐	☐	☐	+	–
7. discuss topic in small groups	☐	☐	☐	☐	+	–
8. use note cards to write brief reports for organization	☐	☐	☐	☐	+	–
9. compose a series of illustrations (captioned) as an adaptation of a written report (cartoon)	☐	☐	☐	☐	+	–
10. allow the student to design evaluations, both oral and written; should be clear, consistent, follow a format	☐	☐	☐	☐	+	–
11. make a transparency to illustrate	☐	☐	☐	☐	+	–
12. make a glossary of words and their definitions	☐	☐	☐	☐	+	–
13. adapt the information for a simple play or skit	☐	☐	☐	☐	+	–
14. make a collage or picture sequence	☐	☐	☐	☐	+	–
15. bulletin board display	☐	☐	☐	☐	+	–
16. show case display	☐	☐	☐	☐	+	–
17. table display	☐	☐	☐	☐	+	–
18. write or tape a new commentary on a subject related to the assignment	☐	☐	☐	☐	+	–
19. interview someone knowledgeable about the topic under study and record it	☐	☐	☐	☐	+	–
20. make arrangements for a guest speaker	☐	☐	☐	☐	+	–
21. keep a journal of information or objectives mastered	☐	☐	☐	☐	+	–
22. prepare a research paper	☐	☐	☐	☐	+	–
23. prepare a slide presentation	☐	☐	☐	☐	+	–
24. prepare a filmstrip presentation	☐	☐	☐	☐	+	–
25. prepare a videotape presentation	☐	☐	☐	☐	+	–
26. take photographs of a subject or topic and present it as an assignment	☐	☐	☐	☐	+	–
27. compile book list on topic or subject	☐	☐	☐	☐	+	–
28. prepare and lead an instructional game	☐	☐	☐	☐	+	–
29. provide an outline for the student and have the student initial spaces on the outline (or write page number) to show they have found the key points mentioned	☐	☐	☐	☐	+	–
30. grade according to each student's progress	☐	☐	☐	☐	+	–
a. at his own level of performance (not peers' achievement)	☐	☐	☐	☐	+	–
b. work completed	☐	☐	☐	☐	+	–
c. what has been achieved	☐	☐	☐	☐	+	–
d. effort put forth	☐	☐	☐	☐	+	–
31. avoid true-false tests (they emphasize nuances in language that confuse students who have reading difficulties	☐	☐	☐	☐	+	–
32. avoid open-ended question (they emphasize memory)	☐	☐	☐	☐	+	–
33. avoid recall items (they emphasize organization)	☐	☐	☐	☐	+	–
34. outline chapter or notes vs. test	☐	☐	☐	☐	+	–

SECTION NINE:

1. MICRO COMPUTERS
2. TIME MANAGEMENT
3. ADVISORY COMMITTEES
4. LOCAL EVALUATION



ADDITIONAL OTHER CONSIDERATIONS

The eight major categories of responsibilities associated with the DVI role in the local setting have been described in the previous sections.

This final section of the handbook addresses four additional areas which can impact on the total effectiveness of the DVI position. These considerations include microcomputers and their application in special needs vocational instruction, techniques for time management, effective utilization of advisory committees, and a process for local DVI evaluation.

Each topic will contain an explanation with selected examples to illustrate the narrative.

MICROCOMPUTER APPLICATIONS

The microcomputer can be a useful tool to the DVI. It serves a variety of functions including instruction, recordkeeping, and word processing. It can be used by individual students, small groups of students, whole classes, or the teacher. However, it is important to remember it is just on of many tools available to a teacher, although a very versatile and useful one.

The microcomputer can assist the teacher by 1) individualizing instruction; 2) providing a non-threatening presentation to the learner; 3) teaching process and product through sequential steps; 4) extending the teacher expertise; and 5) providing data collection and retrieval to aid with non-teaching duties.

Each general use of the microcomputer will be discussed individually in this section. In addition, related areas such as evaluation and sources of software are included.

Types of Computer-Assisted Instruction

An increasingly common and popular use of the microcomputer is as an instructional resource. Actually the computer can be used in a number of ways to assist in the instructional process. According to Florence Taber in her book Computers in Special Education, there are seven general types of computer-assisted instruction (see Figure 7). Microcomputer programs may be limited to one specific type or may combine several types into the same program.

Uses of Software in the Classroom

Computer programs are available which develop skills in academic areas needed for vocational classes. When a student has a deficit in one or more basic skill areas, drill and/or tutorial programs can be used to help ameliorate the deficit(s).

Figure 7
Type and Use of CAI

Type of Computer-Assisted Instruction	Use
Drill and Practice	Reinforce information or skills already learned which need additional practice.
Tutorial	Present information already taught in the classroom but broken into smaller steps.
Simulation	Place learner in situations that replicate original situations.
Computer-Managed Instruction	Instruct the learner at appropriate instructional level through individualized instruction.
Problem Solving	Place the learner in situations to solve problems and to receive appropriate consequences.
Assessment/Evaluation	Determine where the learner is regarding a specific objective and for pre- and post-test purposes.
Data Retrieval	Provide feedback to the student regarding progress toward objectives.

From Taber, Computers in Special Education

Computers can be used to individualize a student's program while freeing the teacher for other responsibilities. The teacher can set up a program geared to the needs and responsibilities of one student and then work directly with other students who need their assistance at that particular time. While the one student is developing skills through a computer program, the other students are working with the teacher. All students, through different modes of presentation, are receiving individualized instruction.

There are programs which can help to develop prevocational skills. Development of skills with applicability to several or all vocational areas can be aided with the appropriate software.

Programs are also available to develop skills in specific vocational areas. Some vocational teachers use the microcomputer for students with EEN who need additional help. When the software in the vocational class is supplementary to the curriculum, it can be used to help the student develop understanding of the subject.

Computer programs are available which may be used to modify a class activity when the usual procedure used with that activity is too difficult for the EEN student. An example would be a program to estimate framing materials needed for a house. If the student has difficulty performing the appropriate calculations, the program will request the needed information. The student must supply the information from the plans and then the computer will perform the calculations and list the results.

The microcomputer can also be used for vocational assessment. Evaluation instruments such as MESA (Microcomputer Evaluation and Screening Assessment) have been developed.

Data Base Use

Another use of the microcomputer for the DVI is for developing a data base. Student schedules, demographic data, and other information can more easily be stored and more quickly retrieved from a single computer diskette rather than a stack of individual files. If a printed copy is needed, a printer will quickly provide the needed hard copy with the desired combination of data. This can be used for developing IEPs by storing an appropriate battery of goals and objectives on a disk and printing the selected goals and objectives for each student on the desired form. Many school systems use the computer for generating IEPs.

The microcomputer can be used to store student records for an entire district. A Cooperative Educational Service Agency (CESA) has developed a program which will store the necessary data for all the students with EEN in several districts served by the same director of special education. Necessary data information is quickly available when needed for state reports or other use.

Communication Using a Computer

For writing reports, letters, or other needed communications, a word processing program can be useful. It can be used to quickly compose, edit, print, and store various forms of written communication.

The DVI may also be able to use electronic mail technology as a communication network as other schools acquire the necessary equipment. While not yet in wide use, electronic mail may someday be used to quickly and relatively inexpensively communicate between groups or individuals without the need for travel across the state or expensive daytime telephone conversations. Electronic mail will allow an individual to enter a message or information into the computer at any convenient time for the computer to transmit at a time when telephone charges are reduced. The person receiving the message can read and respond to the message at a convenient time.

Electronic mail can also be sent through a "bulletin board" which is part of many computer networking services. CompuServ, Source, Micronet, and Edunet are just some of the networks available. Others are specific to users of a particular interest such as Agnet for farmers and agriculture students.

Sources of Software

There are several sources for computer software. there are many programs available from the Minnesota Educational Computing Consortium (MECC) at a comparatively modest cost. Many of these programs are available from commercial distributors as well.

Some CESAs have computing consortiums which provide programs and other services to member school districts. These programs come from several sources including CESA staff, teachers from participating schools, public domain programs, and MECC.

As more schools and teachers use computers, new programs are being developed within the local schools for use in specific situations. Individual teachers are acquiring programming skills to write programs which meet their needs or the needs of their colleagues.

Commercial companies are the largest source of software. There are many publishers involved in the marketing of software with more entering the field each year. Resource A lists many of the businesses involved in producing and distributing software. The quality of the software commercially available ranges from poor to excellent as does software from other sources.

Evaluation of Software

Because of the wide range of software, the consumer must carefully evaluate the products available. Evaluation includes several factors besides the quality of the software itself. (see Figure 8) These include the suitability of the program to the given situation, the needs of the students who will use the software, and the existing skills of the students.

There are several checklists and forms available for use in evaluating software. Some of these forms are included in Resource B.

Figure 8
Common Critieria Used In Evaluation of Microcomputer Programs

1. control over the pace and presentation
2. individualized instruction
3. required reading level
4. method(s) of presentation of instruction
5. degree of interaction in the program
6. use of prompts
7. maintenance of interest
8. type of response(s)
9. language level used
10. reporting student progress

RESOURCE A

Microcomputer Software and Equipment Sources

ADVANCED LOGIC SYSEMS
1195 E. Arques Ave.
Sunnyvale, CA 94086
Machines: Apple II & Apple II +

ANSWER CORP.
502A N. Second Ave.
Sandpoint, ID 83864
Machine: Disk Utility

THE APPLE EDUCATION FOUNDATION
20525 Mariani Ave.
Cupertino, CA 95014

APPLEWARE, INC.
640 Hayes St.
Hollywood, FL 33024

AQUARIOUS PUBLISHERS, INC.
P.O. Box 128
Indian Rocks Beach, FL 33535
Materials: Communication Skills plus Educational Software

ARCsoft PUBLISHERS
P.O. Box 132
Woodsboro, MD 21798
Materials: Apple Books

ATARI, INC.
1312 Crossman Ave., P.O. Box 61657
Sunnyvale, CA 94088

BCD ASSOCIATES
1216 N. Blackwelder/Dept. B
Oklahoma City, OK 73106
Machine: Inter Active Video

BEHAVIORAL ENGINEERING
230 Mount Hermon Road
Suite 207
Scotts Valley, CA 95066

CAREER DEVELOPMENT SOFTWARE
6101 Highland Drive
Vancouver, WA 98661
Materials: Computer Assisted Staff Development for Bus. and Industry

BELL & HOWELL
Interactive Communications Div.
7100 McCormick Road
Chicago, IL 60645
Machine: GENIS I

BEXDATA * LTD
2533 Bernice Road
Lansing, IL 60438
Machine: Quality Computers, Peripherals, Terminals

BIT 3 COMPUTER CORP.
8120 Penn Ave, South-Suite 548
Minneapolis, MN 55431
Machine: Full-View 80 (tm) for ATARI (r) 800 w/32K Mem. plus (tm) for the ATARI (r) 800

THE BLACKSBURG GROUP INC.
Box 242
Blacksburg, VA 24060
Materials: Books, Software & Hardware Products

BORG-WARNER EDUCATION SYSTEMS
600 West University Drive
Arlington Heights, IL 60004
Materials: Micro Courseware

SMALL BUS. COMPUTERS MAGAZINE
One Park Avenue
New York, NY 10016

CAMBRIDGE DEVELOPMENT LAB
36 Pleasant Street
Watertown, MA 02172
Materials: Graphic Software

CAMBRIDGE LEARNING
One Judith Drive
North Reading, MA 01864
Materials: Self-Instruction

CAREER AIDS, INC.
8950 Lurline Ave., Dept. K63
Chatsworth, CA 91311
Materials: Multimedia

CAREER SCAN/COLLEGE SCAN
National Educ. Software Services
1879 Locust Drive
Verona, WI 53593

CENTRONICS DATA COMPUTER CORP.
Hudson, NH 03051

CENTURION INDUSTRIES, INC.
167 Constitution Drive
Menlo Park, CA 94025

CHOICE DIVISION
Career Research Corporation
65 West Gordon Avenue
Salt Lake City, UT 84107

CLASS 1 SYSTEMS
Richard Vandenberg
17909 Maple Street
Lansing, IL 60438
Material: Software for Educators

THE CODE WORKS
Box 550
Goleta, CA 93116
Materials: Programming Software

COMMODORE BUSINESS MACH., INC.
Professional Computer Division
487 Devon Park Dr.
Wayne, PA 19087

COMMODORE COMPUTER SYS. DIV.
300 Valley Forge Square
681 Moore Road
King of Prussia, PA 19406

COMPUTER DISCOUNT OF AMER., INC.
West Milford Mall
West Milford, NJ 07480
Mach/Materials: Computers & Access.

COMPUTER SYSTEMS
680 Almanor Ave.
Sunnyvale, CA 94086

COMPUTER PLUS
P.O. Box 926
Littleton, MA 01460
Mach/Materials: Hard/software

COMPUTER SCIENCE PRESS, INC.
11 Taft Court
Rockville, MD 20850

COMPUVIEW PRODUCTS, INC.
1955 Pauline Blvd., Suite 200
Ann Arbor, MI 48103
Materials: Software Prod.

COMTAL
505 West Woodbury Road
Altadena, CA 91001
Machines: Digital Image Proc. System

CONCEPT EDUCATIONAL SOFTWARE
P.O. Box 6184
Allentown, PA 18001

CONSULTORS INTERNATIONAL, LTD.
Book Division - Box 6589
Denver, CO 80206

THE CORP. FOR PUBLIC INFORMATION IN EDUCATION
1714 Illinois
Lawrence, KS 66044

CREATIVE PUBLICATIONS
3977 E. Bayshore Rd., P.O. Box 10328
Palo Alto, CA 94303

CUESTA SYSTEMS, INC.
3440 Roberto Court
San Luis Obispo, CA 93401

CYBERTONICS INTERNATIONAL, INC.
Software Publishing Division
999 Mount Kemble Ave.
Morristown, NJ

DAHMKE, MARK
1515 Superior Street
Lincoln, NE 68521

DATAPRO RESEARCH CORP.
A McGraw-Hill Company
1805 Underwood Blvd.
Delran, NJ 08075

DATA RECORDING PRODUCTS/3M
Building 223, 3M Center
St. Paul, MN 55101

DATA TRANSFORMS
616 Washington Street
Denver, CO 80203

DATA TYPE, INC.
2615 Miller Avenue
Mt. View, CA 94040

DENNISON KYBE CORP.
P.O. Box 36701
Strongville, OH 44136
Material: Disks, Cassettes, Mag. Cards

DEPT. OF COMPUTER/INFO. SCIENCE
University of Oregon
Eugene, OR 97403
Materials: Evaluators guide for micro based instructional packages

DEPARTMENT OF PUBLIC INSTRUCTION
Career Education Division
Grimes State Office Bldg.
Des Moines, IA 50319

DEVELOPMENTAL LEARNING MAT'S.
One DLM Park
Allen, TX 75002

DICKENS DATA SYSTEM
478 Engle Drive
Tucker, GA 30086

DIGITAL MICROSYSTEMS
1840 Embarcadero
Oakland, CA 94606

DRAFTING SERVICES, LTD.
P.O. Box 9
Payson, UT 84651
Mach/Materials: Micro Processor, Graphics Hardware/Software

DUOSOFT CORPORATIONSTEMS
DATAMAC
Box 1827 or Ave.
Champaign, IL 61820
Material: Business Planner with a structural approach

DYNACOMP, INC.
1427 Monroe Avenue
Rochester, NY 14618
Material: Software

DYSAN CORP.
999 Plaza Drive, Suite 400
Schaumburg, IL 60195
Material: Software

E & L INSTRUMENTS INC.
61 First Street
Derby, CN 06418
Material: DC-10 Manual

EDUCATION COMPUTER COURSEWARE
Science Research Associates, Inc.
155 N. Wacker Dr.
Chicago, IL 60606

EDUCATIONAL AUDIO VISUAL, INC.
Pleasantville, NY 10570
Material: Teaching on Micros

EDUCATIONAL COMPUTER MAGAZINE
P.O. Box 535
Cupertino, CA 95015

EDUCATIONAL TECHNOLOGY CENTER
University of California
Irvine, CA 92717

EDUCATORS MICRO DIGEST
EDUCORP 21 LTD
P.O. Box 1692
Madison, WI 53791

EDU-COMP, INC.
14109 S. E. 168th Street
Renton, WA 98055
Material: Attendance Tracking Systems for Schools

EICONICS, INC.
P.O. Box 1207, 211 Cruz Alta Rd.
Taos, NM 87571
Materials: Software Systems to Facilitate Development of Education courses on micros.

ELECTRONIC COURSEWARE SYS. INC.
P.O. Box 2374, Station A
Champaign, IL 61820

ELECTRONIC LEARNING MAGAZINE
50 West 44th Street
New York, NY 10036

ELLIS COMPUTING SOFTWARE TECH.
600 41st Avenue
San Francisco, CA 94121
Material: Software Technology

EVANS NEWTON INC.
7745 E. Redfied Rd., Suite 100
Scottsdale, AZ 85260
Materials: Software Library Micro Programs for Educators

EXTENSION SERVICE
State of Indiana
Purdue University and the USDA
West Lafayette, IN 47907

EYE GATE MEDIA, INC.
146-01 Archer Avenue
Jamaica, NY 11435

HEALTHKIT/ZENITH
Educational Systems Division
Veritechnology Elec. Corp.
P.O. Box 167
St. Joseph, MO 49085
Materials: Educational Products

HEWLETT PACKARD
San Diego Division
16399 W. Bernardo Dr.
San Diego, CA 92127

HONEYWELL INFORMATION SYSTEMS
200 Smith Street, MS 486
Waltham, MA 02154

HOWARD SOFTWARE SERVICES
8008 Girard Ave., Suite 310
LaJolla, CA 92037

INTERNATIONAL COUNCIL FOR COMP. IN EDUCATION
Dept. of Computer/Info. Science
University of Oregon
Eugene, OR 97403

INTERNATIONAL MICRO SYSTEMS
6445 Metcalf
Shawnee Mission, KS 66202

INTERPRETIVE EDUCATION, INC.
157 S. Kalamazoo Mall, Suite 250
Kalamazoo, MI 49007

KADAK PRODUCTS, LTD.
206 - 1847 W. Broadway Avenue
Vancouver, B.C. Canada V6J 1Y5

KELLER, WYNNE
Rt. 1, Box 507
Solon, ME 04979

THE KEYBOARD COMPANY
7151 Patterson Dr.
Garden Grove, CA 92641

THE S. KLEIN NEWSLETTER ON COMPUTER GRAPHICS
c/o Technology & Business
Communications, Inc.
730 Boston Post Road, Subscription Dept.
P.O. Box 89
Sudbury, MA 01776

LINK SYSTEMS
1640 19th Street
Santa Monica, CA 90404

MACROTRONICS, INC.
1125 N. Golden State Blvd.
Turlock, CA 95380
Machine: Screen Printer for ATARI

CHARLES MANN & ASSOCIATES
Micro Computer Division
55722 Santa Fe Trail
Yucca Valley, CA 92284
Material: Construction Accounting Sys.

MARCK
280 Linden Avenue
Branford, CT 06405
Material: Educ. & Business Software

MATH SOFTWARE
1233 Blackhorn Place
Deerfield, IL 60015

MERRY BEE COMMUNICATIONS
815 Crest Drive
Omaha, NE 68046
Material: Educational Software

MICRO ARCHITECH, INC.
96 Dothan Street
Arlington, MA 02174
Material: Micro Software

MICRO DESIGN
857 West State Street
Hartford, WI 53027
Material: Microfilm Equipment

MICRO INK, INC.
P.O. Box 6502
Chelmsford, MA 01824
Material: Software

MICRO LAB
2310 Skokie Valley Rd.
Highland Park, IL 60035
Material: Software

MICRO LABS, INC.
902 Pinecrest
Richardson, TX 75080
Material: Software

MICRO MANAGEMENT SYSTEMS, INC.
115-C Second Ave., S. W.
Cairo, GA 31728

MICROMATICS, INC.
181 N. 200 West, Suite 5
Bountiful, UT 84010

MICROPRO INTERNATIONAL CORP.
1299 Fourth Street
San Rafael, CA 94901

MICRO SCHOOL PROGRAMS
Bertamaz, Inc.
101 Nickerson - Suite 202
Seattle, WA 98109

MICRO-SYSTEMS SOFTWARE, INC.
4301-18 Oak Circle
Boca Raton, FL 33431

MILADY PUBLISHING CORP.
3839 White Plains Rd.
Bronx, NY 10467

OMBUDSMAN EDUCATIONAL SERV. LTD
1585 N. Milwaukee Ave., Suite 9
Libertyville, IL 60048

ORTHOCODE CORP.
P.O. Box 6191
Albany, CA 94706
Material: Utility Software Programs

SCHOOL MICROWARE
Dresden Associates
P.O. Box 246
Dresden, MA 04342

SCIENCE RESEARCH ASSOCIATES
College Division, P.O. Box 10020
Palo Alto, CA 94303

SCIENCE RESEARCH ASSOCIATES
Mathematics B, 155 N. Wacker Drive
Chicago, IL 60606

SCIENCE RESEARCH ASSOCIATES
Secondary School Division, 155 N. Wacker Dr.
Chicago, IL 60606

SILICON VALLEY SYSTEMS
1625 El Camino Real, Suite #4
Belmont, CA 94002

SOFTWARE NEWS
5 Kane Industrial Drive
Hudson, MA 01749

SOFTWARE PUBLISHING CORP.
2021 Landings Drive
Mountain Views, CA 94043

SOFTWARE TOOLWORKS
Walt Bilofsky, Prop.
14478 Glorietta Drive
Sherman Oaks, CA 91423

SOUTHERN MICROSYSTEMS-EDUCATORS
P.O. Box 1981
Burlington, NC 27215
Material: Instruct./Info. Mgmt. System

STANDARD MICROSYSTEM, INC.
136 Granite Hill Court
Langhorne, PA 19047

STREET ELECTRONICS CORP.
3152 E. LaPalma Ave., Suite D
Anaheim, CA 92806

SUPERSOFT, INC.
P.O. Box 1628
Champaign, IL 61820

SYBEX, INC.
2344 Sixth Street
Berkeley, CA 94710
Material: Computer Books

TAB BOOKS, INC.
Blue Ridge Summit, PA 17214

TEACHER'S PET SOFTWARE
Glenn Fisher
1517 Holly Street
Berkeley, CA 94703

TECHNICAL EDUC. RES. CENTER
8 Eliot St.
Cambridge, MA 02138

TELEPHONE SOFTWARE CONNECTION
P.O. Box 6548
Torrance, CA 90504

TERAK CORP.
14151 N. 76th Street
Scottsdale, AZ 84260

T. H. E. S. I. S.
P.O. Box 147
Garden City, MI 48135

THIRD WAVE PRODUCTS
2 Pequot Park
Canton, MA 02021

TRACESYSTEMS, INC.
1928-A Old Middlefield Way
Mountain View, CA 94043

TRANSTAR
Box C-96975
Bellevue, WA 98009

TYC SOFTWARE
40 Stuyvesant Manor
Geneseo, NY 14454

TYCOM ASSOCIATES
68 Velma Avenue
Pittsfield, MA 01201

UNIVERSAL SYSTEMS FOR EDUCATION
2120-E Academy Circle
Colorado Springs, CO 80909
Material: Software

VERSA COMPUTING, INC.
3541 Old Conejo Road, Suite 104
Newbury Park, CA 91320
Material: Software

VESCOM ASSOCIATES
RR #1 Bruce Circle Dr., Box 135-H
Lockport, IL 60441

VISIBLE COMPUTER SUPPLY CO.
3626 Stern Drive
St. Charles, IL 60174

WESTWARE SOFTWARE, INC.
2455 S. W. 4th Avenue, Suite 2
Ontario, OR 97914

WINDOW
469 Pleasant Street
Watertown, MA 02172

RESOURCE B

Samples of Software Evaluation Checklists

Does the software use the operating system that is standard for your computer system? Or will you have to purchase another operating system in order to run the software?

What language is the program written in? Assembly language is the most efficient; compiled languages are also desirable.

How much disk storage does the package require? How much disk storage is left for use of files?

How flexible is the package? Can you define input and output formats yourself or are they fixed?

How much RAM (random access memory) does the program occupy when loaded from disk? What's the total amount of RAM your system should have to make practical use of the program.

How much does the package cost?

How much are new versions?

Will there be enhancements (new features, fixes of existing limitations)?

Will suppliers notify you of new versions automatically?

Is the system unconditionally guaranteed to be free of program bugs? What do you have to do to get a replacement?

How about backups? Can you use standard procedures built into the operating system, or does the program provide its own backup functions? If the latter is true, can you make an unlimited number of backups?

Is the program easy to use?

Is the program menu-driven or self-prompting?

Does the supplier offer a training course in addition to the manual?

Can you get answers to your problems or questions by phone or by mail?

Can you modify the package to work with nonstandard input/output devices? For example, can you use a serial printed in place of a standard parallel printer?

Have any magazines reviewed the program? What did they say?

Can you contact any local users for their evaluations?

California Library Media Consortium for Classroom Evaluation of Microcomputer Courseware

Checklist of Evaluation Criteria

General	**YES**	**NO**	**N/A**
1. Is this an effective/appropriate use of the computer?	☐	☐	☐
2. Are the objectives/purpose of the program well defined?	☐	☐	☐
3. Does the program achieve its objectives/purposes?	☐	☐	☐
4. Is the program technically sound, free of programming errors, easy to operate?	☐	☐	☐
5. Does it provide a useful summary or report of student performance?	☐	☐	☐
6. Is the program free of excessive competition and violence?	☐	☐	☐
7. Is it free of racial, sex, and ethnic stereotypes?	☐	☐	☐
8. Is the documentation sufficient?	☐	☐	☐
Content			
1. Is the content factually correct?	☐	☐	☐
2. Is the presentation logical, well organized with internal consistency?	☐	☐	☐
3. Can the instructor modify the program (word lists, data, speed, etc.)?	☐	☐	☐
4. Are the interest level, difficulty level, and vocabulary level compatible?	☐	☐	☐
Instructions (available with the program)			
1. Are they clear, complete, and concise?	☐	☐	☐
2. Can user skip them and return to them as needed (HELP)?	☐	☐	☐
3. Is user told how to end program? Start over? Reenter where use left?	☐	☐	☐
4. Can user control speed and sequence of paging?	☐	☐	☐
5. Is there a menu to allow user to access specific parts of the program?	☐	☐	☐
Input			
1. Is input consistent, using common conventions/symbols?	☐	☐	☐
2. Can user correct input if necessary before continuing program?	☐	☐	☐
3. Is there a cursor or other indicator to show where input is to go?	☐	☐	☐
4. Does the computer give a helpful response to input errors?	☐	☐	☐
5. Is the amount of typing required appropriate to the grade level?	☐	☐	☐
Screen Output			
1. Is the screen format neat and uncluttered?	☐	☐	☐
2. Are punctuation and grammar correct?	☐	☐	☐
3. Is the correct answer, or appropriate help, given after a reasonable time or after a given number of errors?	☐	☐	☐
4. Does the program branch to easier or harder material in response to user input?	☐	☐	☐
5. Are responses to errors non-judgemental, free of harsh or demeaning comments?	☐	☐	☐
6. Is the positive feedback for correct response more interesting/enjoyable/ exciting than is the response for errors/failure?	☐	☐	☐
7. Does the program use motivation devices effectively?	☐	☐	☐

CIRCLE those used. STAR (*) ones used effectively to enhance program.

1. timing
2. scoring
3. game format personalization
4. color sound
5. graphics for instruction
6. graphics for reward
7. random order

GRADE LEVEL (Circle): K 1 2 3 4 5 6 7 8 9 10 11 12 college teacher use

SUBJECT AREA(S) _____

SCOPE

_____ single concept program
_____ program is one part of a larger instructional series
_____ complete instructional unit

GROUP SIZE

_____ individual use
_____ small group (2 or 5)
_____ large group/class

DOCUMENTATION

_____ in program
_____ guide/manual
_____ student materials
_____ none

TYPE OF PROGRAM

_____ simulation (a model of a portion of the real world)
_____ educational game
_____ game
_____ drill and practice
_____ tutorial (presents new material for student to learn)
_____ problem solving
_____ testing
_____ authoring system (allows teacher to develop a program)
_____ classroom management
_____ other _____

BRIEF DESCRIPTION OF THE PROGRAM

OBJECTIVES: _____

_____

CONTENT: _____

_____

CLASSROOM USES: _____

_____

STRENGTHS/WEAKNESSES: _____

_____

STUDENT RESPONSE:

1. Did your students like the program? _____
2. Did they want to share it with friends or use it themselves? _____
3. Did they learn from it? _____

OVERALL EVALUATION:

____ Great Program! I recommend it highly!
____ Pretty good/useful— consider purchase.
____ OK, but you might wait for something better.
____ Not useful. I don't recommend purchase.

Modified MCE Program Evaluation Form

Directions: This evaluation form is designed to evaluate four software programs. Answer each of the questions about each program you evaluate. Use the following rating scale:

3 = Excellent
2 = Above Average
1 = Average
-1 = Below Average
-5 = Poor

After rating programs in each area, add up the total scores and place them in the appropriate spaces. Let this rating help you in your decision making in the purchase of microcomputer software.

Names of Programs Evaluated: **Type of Program Evaluated (i.e., tutorial, etc.)**

1. _____
2. _____
3. _____
4. _____

Comments on Each Program:

1.

2.

3.

4.

Program Choice (if applicable) _____

Modified MCE Program Evaluation Form

I. INSTRUCTIONAL CONTENT	Programs 1	2	3	4
1. Is the content consistent with the goals and objectives of the program?	☐	☐	☐	☐
2. Is the program one of a series in which carefully planned learning objectives have been followed?	☐	☐	☐	☐
3. Does the Instructional Guide provide information, suggestions and material to assist the teacher in successfully implementing the program?	☐	☐	☐	☐
4. Are program goals provided that are usable for individualized education programs?	☐	☐	☐	☐
5. Are evaluation materials and/or criteria provided that are usable for individualized education programs?	☐	☐	☐	☐
6. Are prerequisite skills, vocabulary, and concepts determined and presented?	☐	☐	☐	☐
7. Is vocabulary defined or paraphrased in text or in the prerequisite skills portion of the "Program Principals" section of the Instruction?	☐	☐	☐	☐
8. Are diagnostic or prescriptive procedures built into the program?	☐	☐	☐	☐
9. Does the text follow established rules for punctuation, capitalization, grammar, and usage?	☐	☐	☐	☐
10. Are supplemental materials provided for learner and teacher?	☐	☐	☐	☐
11. Is the product designed for appropriate age and ability groups?	☐	☐	☐	☐
12. Is the program compatible with the curriculum?	☐	☐	☐	☐
13. Is the program compatible with the needs of the teacher?	☐	☐	☐	☐
14. Is the content accurate and complete?	☐	☐	☐	☐
15. Are examples provided with directions when appropriate?	☐	☐	☐	☐
16. Are redundance and drill used effectively?	☐	☐	☐	☐
17. Is language appropriate in tone and selection?	☐	☐	☐	☐
18. Are concrete applications for concepts provided?	☐	☐	☐	☐
19. Is feedback immediate?	☐	☐	☐	☐
II. EDUCATIONAL ADEQUACY				
1. Is instructional design of high quality using accepted learning theory?	☐	☐	☐	☐
2. Are learners always the target of interaction with the computer—a personalized element?	☐	☐	☐	☐
3. Are positive responses reinforced?	☐	☐	☐	☐
4. Are frames that follow incorrect responses nonpunishing?	☐	☐	☐	☐
5. In reinforcement variable and random in content and established by behavior management principles?	☐	☐	☐	☐
6. Is branching used where the learner demonstrates need for further concept development before proceeding?	☐	☐	☐	☐
7. Are avenues of communication from the learner to the computer logical and at comprehensible levels?	☐	☐	☐	☐
8. Is evaluation of each concept appropriate and sufficient?	☐	☐	☐	☐
9. Are concepts and skills task analyzed into appropriate steps?	☐	☐	☐	☐
10. Are color, graphics, and animation used effectively to enhance the lesson?	☐	☐	☐	☐
11. Are sound inverse print, etc., employed for attention and reinforcement purposes and not distracting.	☐	☐	☐	☐

II. EDUCATIONAL ADEQUACY (continued)	Programs 1	2	3	4
12. Is syllabification provided for unfamiliar words?	☐	☐	☐	☐
13. Is sentence length dependent on need and learner levels?	☐	☐	☐	☐
14. Is the learner always provided with frames that allow for progression through the program?	☐	☐	☐	☐
15. Does the program provide suitable directions for the learner?	☐	☐	☐	☐
III. TECHNICAL ADEQUACY				
1. Will the program run to completion without being "hung up" because of unexpected responses?	☐	☐	☐	☐
2. Are the programs difficult or impossible to be inadvertently disrupted by the learner?	☐	☐	☐	☐
3 Can learners operate the programs independently?	☐	☐	☐	☐
4. Is the amount on each frame appropriate?	☐	☐	☐	☐
5. Is the length of each section appropriate?	☐	☐	☐	☐
6. Are words and lines spaced for ease of reading?	☐	☐	☐	☐
7. Is variation of type and organization of textual materials appropriate for a clear presentation?	☐	☐	☐	☐
8. Are inappropriate responses considered and handled appropriately?	☐	☐	☐	☐
9. Is the educational technology (i.e., microcomputer) the best available for presenting this subject matter?	☐	☐	☐	☐
10. Are backups available?	☐	☐	☐	☐
IV. OVERALL EVALUATION RATING OF PROGRAM IN ITS ENTIRETY	☐	☐	☐	☐
TOTAL FOR EACH PROGRAM	—	—	—	—

EVALUATION FORM
MICROCOMPUTER EDUCATION PROGRAM (MCE)

I. INSTRUCTIONAL CONTENT	Excel.	Adeq.	Inadeq.	Not Relevant
1. Is the content consistent with the objectives of the program?	☐	☐	☐	☐
2. Is the program one of a series in which carefully planned learning objectives have been followed?	☐	☐	☐	☐
3. Are program goals provided that are usable for individualized education plans?	☐	☐	☐	☐
4. Are evaluation materials and/or criteria provided that are usable for individualized education plans?	☐	☐	☐	☐
5. Are prerequisite skills, vocabulary, and concepts determined and presented?	☐	☐	☐	☐
6. Is vocabulary defined or paraphrased in text or in the prerequisite skills portion of the "Program Principles" section of the Instruction Manual?	☐	☐	☐	☐
7. Are diagnostic or prescriptive procedures built into the program?	☐	☐	☐	☐
8. Does the text follow established rules for punctuation, capitalization, grammar, and usage?	☐	☐	☐	☐
9. Are the supplemental materials provided for student and teacher?	☐	☐	☐	☐
10. Are concepts and skills task analyzed into appropriate steps?	☐	☐	☐	☐
11. Is the product designed for appropriate age and ability groups?	☐	☐	☐	☐
12. Are examples provided with directions when appropriate?	☐	☐	☐	☐
13. Are redundancy and drill used effectively?	☐	☐	☐	☐
14. Is language appropriate in tone and selection?	☐	☐	☐	☐
15. Are concrete applications for concepts provided?	☐	☐	☐	☐
16. Is feedback immediate?	☐	☐	☐	☐

II. ORGANIZATION/IMPLEMENTATION OF PROGRAM MATERIALS				
1. Is instructional design of high quality, using accepted learning theory?	☐	☐	☐	☐
2. Is the program student operated?	☐	☐	☐	☐
3. Are students always the target of interaction with the computer—a personalized element?	☐	☐	☐	☐
4. Are positive responses reinforced?	☐	☐	☐	☐
5. Are frames that follow incorrect responses nonpunishing?	☐	☐	☐	☐
6. Is reinforcement variable and random in content and provided on schedules as established by behavior management principles?	☐	☐	☐	☐
7. Is branching used where the student demonstrates need for further concept development before proceeding?	☐	☐	☐	☐
8. Are avenues of communication from the student to the computer logical and at comprehensible levels?	☐	☐	☐	☐

II. ORGANIZATION/IMPLEMENT. (cont.)	Excel.	Adeq.	Inadeq.	Not Relevant
9. Are color, graphics, and animation used effectively to enhance the lesson?	☐	☐	☐	☐
10. Is music employed for attention and reinforcement purposes?	☐	☐	☐	☐
11. Is syllabication provided for new and/or unfamiliar words?	☐	☐	☐	☐
12. Is sentence length dependent upon need and student levels?	☐	☐	☐	☐
13. Is the student always provided with frames that allow for progression through the program?	☐	☐	☐	☐
14. Will the program run to completion without being "hung up" because of unexpected responses?	☐	☐	☐	☐
15. Are the programs difficult or impossible to be inadvertently disrupted by the student?	☐	☐	☐	☐
16. Is the amount of material on each frame appropriate?	☐	☐	☐	☐
17, Is the length of each section appropriate?	☐	☐	☐	☐
18. Can students operate the programs independently?	☐	☐	☐	☐
19. Are words and lines spaced for ease of reading?	☐	☐	☐	☐
20. Is variation of type and organization of textual materials appropriate for a clear presentation?	☐	☐	☐	☐
21. Does the program end with suitable directions for the student?	☐	☐	☐	☐
22. Is the program designed for appropriate age/ability groups?	☐	☐	☐	☐
23. Is the educational technology (i.e. microcomputer) the best available for presenting this material?	☐	☐	☐	☐
24. Does the Instructional Guide provide information, suggestions, and materials to assist the teacher in successfully implementing the program?	☐	☐	☐	☐

SOFTWARE EVALUATION CHECKLIST

Program Name: _____ **Source:** _____

Subject Area: _____ **Reviewer's Name:** _____

1. **Instructional Range:** _____ grade level
   _____ ability level

2. **Instructional Group for Program Use:**
   ___ Individual ___ Small Group (size) ___ Large Group (size)

3. **Execution Time:** ___ Minutes for average use (estimated)

4. **Program Uses:**
   ___ Drill or practice ___ Simulation
   ___ Problem solving ___ Instructional gaming
   ___ Informational ___ Tutorial
   ___ Other

	1	2	3	4	5
5. **User Orientation: Instructor's Point of View** (1 low/5 high)					
a. flexibility	☐	☐	☐	☐	☐
b. freedom from need to intervene or assist	☐	☐	☐	☐	☐
6. **User Orientation: Student's Point of View** (1 low/5 high)					
a. quantity of directions (clarity)	☐	☐	☐	☐	☐
b. quality of output (content and tone)	☐	☐	☐	☐	☐
c. quality of screen formatting	☐	☐	☐	☐	☐
d. freedom from need for external information	☐	☐	☐	☐	☐
e. freedom from disruption by system errors	☐	☐	☐	☐	☐
f. simplicity of user input	☐	☐	☐	☐	☐
7. **Content** (1 low/5 high)					
a. instructional focus	☐	☐	☐	☐	☐
b. instructional significance	☐	☐	☐	☐	☐
c. soundness or validity	☐	☐	☐	☐	☐
d. compatability with other materials used	☐	☐	☐	☐	☐
8. **Motivation and Instructional Style** (1 low/5 high)					
a. type of student involvement (1 passive/5 active)	☐	☐	☐	☐	☐
b. degree of student control	☐	☐	☐	☐	☐
c. use of game format	☐	☐	☐	☐	☐
d. use of still graphics	☐	☐	☐	☐	☐
e. use of animation	☐	☐	☐	☐	☐
f. use of color	☐	☐	☐	☐	☐
g. use of voice input and output	☐	☐	☐	☐	☐
h. use of nonvoice audio	☐	☐	☐	☐	☐
i. use of light pen	☐	☐	☐	☐	☐
j. use of ancillary materials	☐	☐	☐	☐	☐
k. use of _____	☐	☐	☐	☐	☐

9. **Social Characteristics**	**Present and Negative**	**Not Present**	**Present and Positive**
a. competition	_____	_____	_____
b. cooperation	_____	_____	_____
c. humanizing of computer	_____	_____	_____
d. moral issues or value judgements	_____	_____	_____
e. summary of student performance	_____	_____	_____

SAMPLE SOFTWARE DOCUMENTATION SHEET

Program Name: _____
Subject Area: _____

Program Class:
_____ isolated program
_____ part of a ____ program cluster

Program Source:
Name: _____
Address: _____
Phone: _____
Program Cost: _____

System Requirements:
Computer: _____
Language: _____
Memory Needed (bytes): _____

Intended Audiences
_____ Teachers
_____ Students in grades (s) _____
_____ Other _____

Program Uses (1 = primary, 2 = secondary)
_____ drill or practice
_____ tutorial
_____ simulation
_____ problem solving
_____ informational

Input Mode:
_____ cassette
_____ cartridge
_____ inch diskettes
_____ other

Output Mode:
_____ color monitor
_____ B/W monitor
_____ plotter
_____ printer
_____ other (specify) _____

Prerequiste Skills:

Name(s) of Prerequisite Program(s)

Classroom Validation Name(s) of Follow-up Program(s) - *describe*

Date of the Documentation: **Time for Average Execution in Minutes:**

General Description of the Program (purpose of the program)

Special Program Characteristics (use of graphics or sound, designed for use by groups of two or more persons at a time, level of difficulty can be modified by teacher (only) or student, exit from program is controlled by the teacher (only) or student, etc.

Directions for Use of the Program (directions not presented in the program itself but needed for program execution, directions regarding the use of the program within the total instructional process, notes regarding program options, etc.

Ancillary Materials Required (books, worksheets, charts, data lists, dice, geometric shapes, lab equipment, etc.)

Additional Documentation Available (check box for each type)

Sample run (location _____)

Program listing (location _____)

EFFECTIVE TIME MANAGEMENT

A strength of the DVI model is the reallocation and effective use of existing resources. For the DVI, this includes a reallocation of time which is a critical issue in the successful implementation of the DVI approach. The DVI can develop proficiency in certain strategies related to the efficient use of time. Although the DVI model varies from district to district, certain guidelines for the management of time can be offered. Therfore, this section of the Handbook provides suggestions for effective use of time. Additional information regarding general time management practices is available in the resource section. Some helpful hints for managing your time as a DVI are as follows:

Helpful Hints

- Keep a calendar. As a resource person it is imperative that you are dependable. A calendar that is small enough to carry with you at all times is recommended.

- Using a daily "to do" list will assist in keeping you on task in your DVI-related activities. It is suggested that you use a system of prioritizing these daily activities. (See Resources A & B)

- Set weekly goals for yourself that correspond to your local DVI plan. This allows you to monitor your progress toward major goals on a week-to-week basis. Keep these goals visible for easy reference when planning daily activities. (See Resource C)

- Try to obtain needed information regarding upcoming assignments, tests, and lab exercises in advance so that you can incorporate them into weekly and daily plans. Where applicable, a copy of the vocational education instructor's weekly lesson plans would assist in this.

- Learn the schedules of staff you are working with. Knowing when staff members have study hall supervision and preparation time will aid you in your daily planning.

- Keep an on-going log. Not only will this provide you with needed accountability but will also provide you with a means of evaluating your utilization of DVI time.

- Whenever possible, delegate responsibility to students. To what degree this can be done depends on the individual student. Tasks such as obtaining daily progress sheets or getting notes for copying will provide an opportunity for the student to be actively involved and same you time.

- Use student assistance to accomplish clerical and technical tasks such as typing, filing, collating, and taping textbooks. Check with business education staff for recruiting students either on a volunteer or employed basis.

- A computer can be a valuable tool in the management of time. Suggestions for its use are available in the "Microcomputer Applications" section of this handbook.

- Because of the nature of the DVI role, situations needing immediate attention are inevitable. When this happens, you will need to adjust your daily plans accordingly.

However good your intentions in the DVI role, successful implementation depends on how well you use the time allocated. If you are inefficient in your use of time, you will either fail to accomplish as much as you should, or you will be forced to spend much of your personal time in DVI related activities. Your accomplishments as a DVI will have an impact on the administration's commitment to the future of the DVI model.

RESOURCE A

Daily Time Log

NAME: _____ **DATE:** _____

DAILY GOALS: **DEADLINE:**

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

PRIORITY: 1 = Most Important 2 = Less Important
3 = Routine Detail 4 = Least Important

Time	Activity	Time Used	Priority	Comment/ Disposition

From: About Time! by Alec MacKenzie and Kay Cronkite Wal

RESOURCE B

How to Use the Daily Organizer

1. Establish a system for denoting priorities.
   Priority A = Must do today
   Priority B = Should do today
   Priority C = Could put off
   Priority D = Can delegate

2. In the TO DO section, list your paperwork goals for today, assigning each one a priority, A, B, or C. If one of your goals can be delegated to an employee, list it as an A/D, B/D, or C/D. If, while you are doing paperwork, it is necessary for you to make a phone call to clarify a point, make the phone call then, rather than listing it on the TO PHONE list. If your concentration on the paperwork project is interrupted by having to make a phone call, you will lose valuable time.

3. In the TO PHONE section, list each person you plan to call that day and the subject. Again, assign a priority to each call.

4. In the APPOINTMENTS section, list the time, the person you will be seeing and the place (you office, appointee's office, or other). In the TIME column, put the maximum amount of your time you think this appointment warrants. A minute or two before that amount of time is used up, start to bring the conversation to a close. You will not always be able to do so, but with the time goal before you, you will find it easier to keep appointments from dragging on unnecessarily.

5. Appointments must be taken care of as they have been scheduled. However, on your TO DO and TO PHONE lists, complete all A priorities before going to B priorities. Complete all B priorities before going to C priorities.

6. During the day enter any task or phone call on which you need to follow up in the TO FOLLOW UP section. Put down enough detail so you will know exactly where you have left off and what the next follow-up set is. Consider this section as you prepare your Daily Organizer for the next work day.

7. Schedule one hour of uncommitted time each day to take care of the unexpected. If you do not need the hour, use it to catch up on desk work.

RESOURCE B

Daily Organizer

DATE: _____

TO PHONE:

Person	Regarding	P

APPOINTMENTS

When	Person/place	Time

TO DO:

Task	P

TO FOLLOW UP

RESOURCE C

Weekly Plan

WEEK OF _____

1. **GOALS TO ACCOMPLISH**

2. **TO TELEPHONE**

3. **PROJECTS OR TO WRITE**

4. **APPOINTMENTS**

5. **MEETINGS**

6. **MISCELLANEOUS**

RESOURCE D

Monthly Objectives

Priority	Monthly Goals	_____ Month	To Be Done In Week Of	Follow-Up
	1.			
	2.			
	3.			
	4.			
	5.			
	6.			
	7.			
	8.			
	9.			
	10.			
	11.			

Taken from: About Time!

RESOURCE E

Annual Objectives

Priority	Monthly Goals	_____ Year	To Be Done In Week Of	Follow-Up
	1.			
	2.			
	3.			
	4.			
	5.			
	6.			
	7.			
	8.			
	9.			
	10.			
	11.			

Taken from: About Time!

RESOURCE F

Time Management Tactics

I. Goals and Priorities

All management depends upon a clear and realistic system of goals. Once you are clear about what is to be achieved, it is possible to practice a moment-by-moment judgment about priorities—what is most important to do **now**? Whatever can be done right now to move you a step closer to the achievement of goals is the thing to do.

A simple but effective system of prioritization is to divide all of your possible activities into three parts: A's, B's, and C's.

A's About 5% of your possible activities rate first priority ranking. These are the things that lead directly to the accomplishment of goals. On any particular day it is rare for a person to have more than three A-type activities—you should never be in doubt about what these are, and every effort should be made to focus attention and energy upon making progress on them.

B's About 15% of your possible activities fall into this category. These are things that are important and are related to your goals but which do not have to be done immediately or which are not actually required to reach a minimal level of goal achievement. As you become successful in managing time for accomplishment of A's, it becomes possible to perform more of the B's. As you are able to perform more B's, your reputation for excellence grows—you become known for "doing it right."

C's About 80% of all possible activities fall into this category. These activities do not relate effectively to the accomplishment of goals. They are usually easy little tasks that can be performed quickly and in large volume. You are tempted to do them in order to have a sense of "getting things done." In fact, they are a waste of effort. They rob you of time for A's and B's.

A common protest: "But I'm required to do all these C's!" NOW HEAR THIS: Immediately empty a drawer in your desk or get an empty cardboard box. Throw all incoming requests and paperwork which you classify as a C in this drawer. At the end of the week, lay some sort of divider over the stack in this drawer. At the end of the next week, layer again. After one month, pull out the bottom layer and throw it away! If no one has mentioned the stuff for thirty days, it's probably not worth doing. If you are anxious about throwing it away, ask three questions:

1. Who can help me exercise the authority to discard this stuff?
2. If this stuff is important to my organization, can I recommend a less costly way of getting it done?
3. Am I a pack rat? If so, when am I going to stop letting this stuff be my illusion of security?

II. Keeping A Calendar

If you are serious about time management, you are within reach of the calendar on which you record your plans.

Recommendations:

1. You should have one master calendar which is always within reach. Your support staff (secretary/assistant) may have duplicates, but the authority to confirm appointments must be reserved to yourself. When duplicate calendars are in use, coordinate twice daily—at the beginning and end of the day.

2. Small calendars that fit pockets and purses are hard to beat for convenience, and they are, therefore, most likely to be used.

3. To satisfy all of your preferences, you may have to resort to making your own pocket calendar.

   Example: On a 3 x 5 inch spiral bound notebook, draw several pages of month at a glance, use the rest of the pages for expenses, and use some pages for daily to do lists.

4. Never calendar C activities. Treat C's as the interruptions they are. This recommendation makes it possible to use a very small calendar with great effectiveness. It keeps you focused on A's and B's.

5. Always leave an hour a day unscheduled. If all of tomorrow is scheduled except one hour, tell people you are completely scheduled. Save the hour for the inevitable emergency.

III. Keeping a Daily To Do List

Every serious time manager keeps a daily to do list!

Recommendations:

1. Keep your TO DO LIST always within reach.

2. When you make your TO DO LIST, label the A's (always prioritize).

3. When your TO DO LIST exceeds fifteen items, you've got a problem:
   a. you're putting too much detail on the list
   b. you're "padding" the list with C's
   c. you're suffering a more or less temporary delusion of superhuman capabilities.

IV. Use Memory Systems

Effective memory systems serve the following purposes:

1. They store data until it is needed, and they make it easily available when needed.

2. They keep data that is irrelevant to the immediate task out of the way—memory permits concentration.

3. Memory systems keep us from repeating ourselves.

4. Memory systems allow us to pick up where we left off—memory permits the accumulation of results from short bursts of efforts.

5. Memory systems permit pattern recognition—memory permits the discovery of "short cuts" to the "heart of the issue."

Memory systems consist of a large range of devices. For instance:

1. Filing systems,

2. Graphs, charts, posters, pictures, slogans,

3. Procedural manuals or reference works,

4. Notes of meetings that are made on large charts during the meetings so that everyone can see what is being said and recorded,

5. Logs, journals, diaries,

6. Follow-up memos,

7. Tickler files—usually card files arranged by date so as to remind you of commitments made for follow-up,

8. Calendars and to do lists.

Recommendations:

1. Don't clutter up your organization's permanent files with your memory systems—keep your memory systems as "working files."

2. Don't clutter up anyone's systems with C's.

3. Try to avoid memory systems that involve writing. Instead, use charts, graphs, forms, and card systems.

4. Never collect data in a random style—if it isn't worth organizing, it isn't worth keeping.

5. Don't be afraid to collect data you used to ignore—you may be on your way to a great discovery! But, never collect data that is irrelevant to your A's.

V. Concentrate

Most efficient people are characterized by an ability to concentrate. Learn to set yourself up for doing one thing at a time with complete devotion even if for only brief periods. Concentration is not the same as completing your task in one effort. It is being able to make real progress on a task even during very short periods of attention.

Concentration is largely the result of a passion for your goals and priorities, and a working environment full of effective memory systems. This is to say that the ability to be in the present is dependent upon a firm grasp of your future and your past.

VI. Closure

Much time is saved by forcing events and activities to a clear ending. Summaries, announcement of decisions, celebration of accomplishments, declarations of defeat, pronouncement of death are all acts of liberation from ambiguity and form the basis for the focus of new bursts of energy.

Eight Basic Settings for the Management of Time

I. *One-to-one communication* with other people: This may be in person or by phone. It is basically a setting for verbal communication.

II. *Group communication*: This setting involves more than two people and is usually characterized by verbal communication.

III. *Planning time*: This setting is defined as time spent alone specifically working on questions of the future, what you want to have happened, and how to go about accomplishing it.

IV. *Reading*: Time alone with correspondence, reports, journals, and books.

V. *Writing*: Time alone to draft correspondence, reports, or publishable materials.

VI. *Reflection*: Time alone to simply review what has been happening or is about to happen, to explore where you are in the creation of your life, to relax, or to expand your capacity for concentration and creative thought.

VII. *Transition time*: These are the moments between events frequently characterized by commuting from place to place, or waiting.

VIII. *Personal care*: These are the periods of time spent on self maintenance such as physical hygiene and grooming, shopping, dressing, physical exercise, sleeping, and eating.

How to Use Your Goals and Priorities to Save Time

One-on-One Settings

Listen for an answer to this question: Can we help each other achieve our respective goals?

After two minutes of preliminaries, begin stating the purpose of your meeting. If there is more than one purpose, be sure all of them are stated at the beginning so that the other person can help you allocate the available time.

If after two minutes you sense that this meeting is useless to your priorities, begin closure.

Be aware of the "add-on" agenda. Often the "add-on" agenda is the real and hidden purpose of your meeting. Think about why this agenda must be approached indirectly. Indirect approaches are usually tricky and slow.

Group Settings

Always publish an agenda before calling a group together for a meeting. If the agenda is not published ahead of time, make sure it is completely exposed at the beginning of the meeting.

Before inviting people to a meeting, be sure they are the right people. Treat the members of the group as precious resources. If you need their input, be sure they are there; if you don't need them, don't waste their time.

Be ready to change the membership of your group as you move from one agenda item to another. Each agenda item is relevant to a different set of people.

It is often useful to set time limits on each agenda item. Make sure everyone knows about such time limits at the beginning.

Planning Settings

Your goals and priorities imply a value system, philosophy, or theoretical approach. Refine this value system as time passes so that it becomes a familiar framework within which to do your planning. It becomes a sort of list of important questions with which to judge and improve your plans.

Planning time is hard to come by—invest it in A's.

It is often found that the best time for planning is at the beginning of the work period—immediately after checking in with your support staff. The whole work day takes shape when it begins with an attack on an A priority.

Reading Settings

Make the first contact with incoming reading matter a sorting process—A's, B's, C's. This will be the last time you touch about 80% of the stuff. At this first contact, don't permit yourself to be distracted from your sorting purpose—only read what you have to in order to decide if it is an A, B, or C. A secretary or assistant, if available, should do this for you.

Stop reading other people's mail! If you've delegated a task, make sure all reading matter related to that task is routed directly to that person. Their written responses should not require your approval all of the time either. Set clear rules about when your approval should be sought.

When you get behind in your reading (and you will, at least occasionally), get a list of the backlogged priority matters. Break up the list into pieces that will be done on each of the next five days. Get back on your regular daily schedule immediately and add these catch up items. The point: don't let the backed up stuff contaminate all of your work—keep the back-up isolated.

Know what you are looking for before you read anything. Answer the question: What do I want to find in this reading matter? Then read.

Writing Settings

With A's, there are usually other people involved. Talk to them first—all of them—before putting anything in writing. Avoid trying to initiate changes with memos. It's a terrible waste of time.

Avoid writing diapers! Diapers are for keeping your tail end covered. A good log and to do list are far more efficient for this purpose. Diapers are a pretention of having done something. If the thing wasn't worth doing, don't pretend to have done it—it demeans you. The best defense agains attacks from the rear is to keep the attackers busy responding to your offensive on A's. Before writing, check your memory systems—perhaps the wheel you are about to invent already exists! Don't let "pride of authorship" get in the way of using the most immediate means to your goals; e.g., something someone else has already written.

Reflection Settings

Imagine the achievement of your goals. Take time to create in your mind visual images of what things will be like when your goals are achieved.

Explore the value system impled in your goals. Imagine a dialogue with a bright friend whom you try to persuade to adopt the same goals. Listen to their questions!

Imagine yourself being introduced on the Phil Donahue or Merv Griffin show. What should several million people know about you—now or five years from now?

Transition Settings

Use transition time for "grounding"—getting yourself fully present to concentrate on the next event.

Make a vow never to "wait" again in your life. Be prepared to use these "wind-fall" gifts of time.

Learn to accept transition time as a period for letting your life energies flow back to contact with Goals and A's—the source of revitalization!

Personal Care Settings

Select health goals such as those outlined in aerobics. Structure your exercises to achieve these goals.

Stay "clean and bright" in your external appearance. Always be prepared to meet with the "president" or "director" of your organization. Make yourself look like who you are becoming.

A balanced diet is a goal. Calorie counting doesn's assure a healthy diet.

How to Concentrate and Save Time

One-on-One Setting

Listen! Give feedback that lets the person know you are listening. Make eye contact with the speaker. Paraphrase what the speaker says in order to show that you have heard the content accurately. When appropriate, show that you are hearing how the person <u>feels</u> about the subject also.

Avoid the expression of your own negative feelings about anything. You must recognize and deal with problems, but do so in a descriptive, factual, and rational way. The expression of negative feelings in these critical situations almost always creates "noise" in the communication process and slows you down. (This is a recommendation against spontaneous and authentic expression of feeling.)

Concentration depends upon first seeing the whole subject being considered, then taking the subparts <u>one at a time</u>. Don't try the second part without the first.

Forbid interruptions:

1. If you know that one such interruption for a VIP is unavoidable, let the other person know ahead of time.

2. If you don't have a secretary who can divert interruptions, say to your interrupting caller, "I'm having a very important conference right now and I would appreciate it if you would let me call you back at (estimated end of conference)." Your next line may have to be, "I'd rather not give you a thoughtless response. I'd like to talk to you about this. May I call you back at (estimated end of conference)?"

3. If the interruptions are really bad, move to a protected conference area.

Be systematic in working on problems:

1. Get a statement of the felt problem

2. Collect data about the problem—specific illustrations of when, where, how, and to whom it happens

3. Restate the problem—define it

4. Generate alternative solutions—always at least three

5. Choose an alternative to try. (You may want to "sleep" for a while on the alternatives before making this choice.)

Group Settings

Publish an agenda to allow people to prepare for meetings.

Create an opportunity for everyone to speak, briefly, early in the meeting. This procedure takes care of psychological needs for inclusion and helps each person get started in talking to the group. Get everyone's door open for participation.

Before allowing the group to begin working on its task, make sure everybody understands and agrees upon the procedure the group will use in working on the task; e.g., what is the desired outcome? How will a final decision be made (by the group or by one member of the group, or by someone else to whom the group will make recommendations). Are all people expected to speak in certain sequence or in a free-for-all fashion? Are there any special constraints within which the group must work: time, money, authority? Stick to the procedure agreement unless the group wants to stop and make a new one.

Establish a climate of confidentiality when groups do problem solving. Get an agreement that until the best decision has been reached and is ready for announcement, the group's processes are to remain private. Without such an agreement, group members may become afraid to speak freely—this seriously slows down the process and hampers the creativity of the group's thinking.

Use a memory system while the group is working—a visual display of what problem the group is working on, what has already been said, and what remains to be done.

Planning Settings

Set aside a regular time for planning—if necessary begin with thirty minutes, but expand it toward two hours a day. Explain your plan to everyone else in the organization who might interrupt you--usually they will be sympathetic and cooperative.

Planning is a creative process and requires lots of concentration. Most people find it easiest to do early in the work day before serious distractions come to them.

Planning is the art of thinking backward. Begin by defining the "end state" of the project you are planning. The rest of the planning process is a matter of filling the gap between where you are now and the end state.

All planning follows one basic process:

1. Defining the end state of the project—what will it look like when it is finished; what's its purpose?

2. Task analysis—what are all the pieces that have to be done in order to complete the project?

3. Sequencing of tasks—line them up according to what can be or has to be done first.

4. Resource allocation—what materials, people, time, space, equipment, and money are required for each piece of the project, and for the whole project?

Develop your ability to brainstorm. First, go for quantity of ideas; second, judge the quality of ideas. *Don't mix the two mental functions*—do each separately. (Brainstorming is especially helpful in defining end states and in doing task analysis.) Ask these two questions:

1. If this project continues, where will it be three years from now?
2. Where would I <u>like</u> this project to be three years from now?

The difference between your answers becomes the goal of your planning—it is the problem you are trying to solve.

"Swiss cheese" your planning projects—punch little holes in them by brief periods of effort. Eventually the time comes when all that is left to do is to link up all the little pieces of completed work. When distractions cross your mind, note them on your to do list and set them aside. Most of us are not familiar with systematic planning and haven't experienced

its benefits. That's why there always seem to be other things more important to do.

Make a place for planning: a special desk or area, an environment that is full of memory systems that push and pull you toward your goals. When you need a break during planning time, don't risk looking at other tasks. Develop an appreciation for an art form that can be used at these times. Sit back and receive its creative energy. Poems, painting, and pieces of music can do this for you.

Reading Setting

Touch presorted correspondence only once—if at all possible, answer it immediately. At least make a note of what you have to do before it can be answered. Perhaps there is something that needs to be delegated—delegate it immediately and put the matter in a tickler file.

Strive never to read anything completely:

1) Read for conclusions only, then decide what else should be read.
2) Read for structure of approach to subject; this will give you all the familiarity you want with 80% of the reading matter you need to give attention.
3) Read for surprises only:
   a. Do reports indicate that things are OK?
   b. Do letters and memos accurately confirm agreements?
   c. Do books or articles indicate anything new of significantly different from earlier findings?

Develop a personal working relationship with the reference librarian of your library and with the manager or other bright employee of your favorite bookstore. Let these people save you from searching for things—most of them love to help!

Writing Settings

Use your dictation equipment! Practice makes it a friend.

Try letting your dictation machine run continuously. This gets some people started fast and keeps them moving quickly enough to remain spontaneous and personal in the use of words. At first you may want to warn your typist and allow rough, double spaced transcripts. Even with this editing process, most people speed up their writing. After a while, less editing is needed.

Word by word dictation to a secretary or assistant is inefficient. Develop the sort of working relationship in which you can trust that person to draft material once you have indicated:

a. Your basic response
b. Your suggestion about where to find necessary resources
c. The tone in which the letter should be written

Make it easy for people not to read all of what you write.

1. Put your conclusions and recommendations up front and obvious. If they agree, they will rarely read on and will give immediate approval. If they disagree, they will read more carefully, see your reasoning, or perhaps save you from embarrassing oversights.

2. Be sure you make very clear what you want people to do with the information you provide. Once they know this, they can read the information selectively.

Don't lie or try to be fakey in print. You will be caught, and the damage to your reputation will slow you down for a long time afterward. Say what you have to say simply and clearly; it saves everybody time by allowing complete concentration on the subject matter.

Avoid using a lot of long words and long sentences. Words of three syllables or more, sentences with more than 15 words, and paragraphs of more then five sentences make reading hard and slow.

Treat your longer writing projects with planning tactics. An outline is your statement of the end state, your task analysis, and your task sequencing. Use an outline.

Reflection Settings

Take time to learn or invent structures for your periods of reflection. Most people find that structure adds depth of their meditation and allows greater concentration.

Use periods of reflection as an opportunity to practice concentration. The most common concentration exercise is breath counting. Try to exclude all distractions while focusing on your own breathing. The counting keeps your analytical mind occupied in a simple way, especially if you only count up to four as you exhale and then start over. Don't be too shocked when you find out that you can't stay focused for more than 7 seconds—that's a normal place to start. A half hour of practice a day may get you up to three minutes after six months or so. By then, you will be surprised at how much your overall capacity for concentration has improved.

The bubble exercise is an unstructured form of reflection that is very relaxing. Imagine laying at the bottom of a lake where it is cool and quiet (don't worry about drowning; in this case you have gills). Let your mind come up with images. See each of these images as a bubble slowly rising to the surface of the lake. Just observe each image or bubble with child-like curiosity. Don't ask a lot of questions or try to make any meaning out of this. Just be curious. For many people, these bubbles take about nine to fourteen seconds to rise to the surface and disappear. Then another appears. It's usually a steady rhythm. Find it; don't force it.

The lotus exercise is a helpful structure for concentrated reflection. The lotus is a flower with a thousand petals around its center. The idea is to put the subject of your reflection in the center of the lotus and begin exploring all of the related petals or images. Your mind starts with the subject, finds an association, follows that association as it leads away from the central subject and then makes it curve back into the center. This may take twenty or thirty seconds. The mind then finds another association and repeats the process, always coming back to the center. There are usually at least a thousand possible associations, and the exploration of them enriches one's understanding of the central subject. People, single words, phrases, and images of things make good central subjects.

Hold an imagined dialogue with a friend about the problem you want to reflect upon.

Try using periods of reflection to memorize and recite favorite prayers, poems, or selected prose. Tear out the pages you are working on and carry them between the pages of your calendar. Pre-record the material on your portable tape recorder and turn yourself on!

Transition Settings

Be prepared with small portions of A's you can work on when unexpected waiting occurs. Write a paragraph, make an outline, draw a chart. Five minute attacks on A's can be very effective.

Avoid letting yourself get emotionally involved when disruptions to your planned schedule occur. Your irritation at being kept waiting will only further distract you from maximum use of your time with the person when the conference does get started. Uncontrolled disappointment can spoil your perception of other opportunities!

Develop a "Ready When You Are" Club. This should be an exclusive group of people with whom you are frequently associated in important matters and with whom communication is easy and flexible. They should be people who know how to concentrate. With these people you enter into the following relationship:

1. I will let you know when my part of a common task is done and ready for review with you. I'll let you know that I'm "ready when you are." From that point in time onward, if any unexpected opening occurs in your schedule, you can check with me and I'll do what I can to be available. And vice versa.

2. When appointments cancel or other such interruptions occur, you pull out all the "ready when you are" notices from your club members and start calling until you find one who can work with you.

Personal Care Settings

Remember the point of this time, personal care. Don't let it become a period of time when you abuse yourself either physically or emotionally. Taste your food; experience its texture. Notice its color and arrangement on the plate or in the serving bowl. Many people have found that a **genuine** and concentrated appreciation for food has helped them stop overeating and stopped them from eating unhealthy foods.

Anything that causes you to wake up mad at yourself is costing you an enormous amount of time for the rest of that day. Change.

Vacations are usually more relaxing and satisfying when planned. Remember your relaxation goals, and keep your calendar and to-do list working for you.

When shopping, use a shopping list—it will save your time and it will keep you from impulsive buying.

RESOURCE G

Meeting Agenda

DATE: _____ **TIME:** _____ **LOCATION:** _____

Persons to Attend: **Responsible For Items:**

1.
2.
3.
4.

Approx. Time	Item	Decision	Person Responsible	Deadline

___ 1. _____

Points to Consider

A.

B.

C.

___ 2. _____

Points to Consider

A.

B.

C.

___ 3. _____

Points to Consider

A.

B.

C.

RESOURCE H

Conducting Business & Professional Meetings

I. Essentials for a Good Meeting

A. Start and stop on time

B. Have an agenda. It is desirable to make the agenda available for participants in advance of the meeting. An agenda is proof that the chairman and others have spent time planning the meeting.

C. Good physical environment in the meeting room, characterized by:

1. Proper temperature control
2. Comfortable seating
3. Sound equipment available and in working order
4. Adequate lighting
5. A minimum of distractions; such as, street noises, telephone calls, announcements over public address systems, through traffic from one room to another, etc.

RESOURCE I

Rules for Managing Telephone Calls

Here are some ideas for changing your telephone into a time tool.

1. Instead of using separate "While you were out" or similar memos for telephone messages, use a bound phone memo book. Several copies are printed to a page, with carbon. The original page is perforated so it can be torn out and given to the callee, and the carbon copy remains in the book as a permanent record of the call.

   The time advantages of this system over separate memos are:

   a. Copies of separate messages tend to get misplaced. To be of use they must be filed chronologically or kept on a spike file. They are difficult to work with this way. Bound in a book they are kept chronologically, no filing is necessary, and specific messages are quickly located.

   b. If the name or phone number of a person who called is needed several days or weeks later, your professional assistant has the information in the permanent record book.

   c. You have a record of the frequency of calls from the same person.

   d. You have a record of the frequency of calls on the same subject.

   e. You have a record of how many incoming calls are being received by your office as a whole and by individual staff members.

   f. Having such records on hand saves the time of having to make a survey whenever this information is needed.

2. Keep a similar record of all outgoing calls you make. Jot down the date, time, the person's name, phone number, and a brief summary of the conversation. You may want to use the same kind of phone memo book mentioned above for incoming calls. With a colored marker, "paint" the edge of the pages along one side of the pad to distinguish these from the incoming calls. Keep this book on your desk near the phone. The originals can be torn out, stapled to any memos from the same person or on the same subject, and filed for future reference. It would be a good idea to have each staff member follow the same procedure.

3. To make your telephone messages brief and to the point, think of TEA.

   T: Tell the person, in one sentence, if you can, the purpose of your call.
   E: Explain briefly.
   A: Action. Say what you plan to do or what you want the person to do.

   For example:
   T: Jim, we need to repair boiler #2.
   E: The pressure is way up.
   A: Will you check it out right away?

4. Cut down on your incoming calls by educating your caller to phone your support people instead of you. When someone calls you for information a support person could handle, say "Jim is knowledgeable in that. May I have him call you back in 30 minutes?" Then explain the situation to Jim and be sure he calls back at the specified time with the information the caller asked for plus any other helpful information available. Soon, most of your callers will learn they can get what they need quicker by going directly to the subordinate.

5. Train your professional assistant to screen your calls. Your assistant should know the organization well enough to know who can handle which calls, and should be skilled in making time-saving suggestions to callers. However, if your assistant does not know who should take a call, have them take the caller's name and phone number and have the proper person return the call. This procedure is better public relations that taking the caller on an unasked-for tour of the organization by phone. Caution your assistant to be thoughtful of the caller's

time. A caller should not be kept waiting on the line indefinitely. If delay is unavoidable, a return call should be suggested. If it is necessary to put a caller on "hold," your assistant should make a reassuring check with the caller every minute or two at the most. Eliminate "still busy" and "hold on" from your assistant's vocabulary. Instruct them to say a complete sentence, such as, "I'm sorry for the delay, Mr. Smith" or "Mr. Hunt will be right with you, Mr. Smith," and wait for a second or two before leaving the line again in case the caller wants to say something.

6. When you leave your office for any length of time, it is time-wise to tell your assistant where you can be reached and approximately how long you will be there.

7. Let your caller know your time constraint. If you have only three minutes to talk, say so at the beginning. then it will be easier to close the conversation when the three minutes are up.

8. Keep a three-minute egg timer by your phone. When you begin the conversation, turn it over. If you turn it over more than one more time before the call is ended, the call may be dragging on too long.

9. Place your outgoing calls in priority order. If you cannot complete them all, you will have completed the most important.

10. Keep a list of frequetly called numbers by your phone. Be sure also to include emergency numbers. Your assistant should also have this list handy.

11. If you are making a call and are about to be put on hold, find out who you are talking with and the extension number in case you are cut off.

12. Don't play ping pong on the phone. If you return a call to someone and they are out, let the secretary know when you will again be available, or ask the secretary when is the best time to reach the other person, or make an appointment to call at a specific time.

13. Always identify yourself when you call or answer the phone. The game of "Who am I?" is a wasteful time displacer.

14. If you are unable to reach the person you call, you can make an appointment through the secretary to call back at a certain time, to avoid another time-consuming, unsuccessful attempt to reach your party.

15. If it is feasible in your situation, limit the time you will accept calls, say from 1:00 to 3:00 in the afternoon. Preserve the first hour of the day to make outgoing calls.

16. You may be getting calls that are prompted by a lack of information. Your business letters may not be giving enough information, thus prompting a telephone call for more detail. Your organization may need to update price lists, schedules, etc.

17. Could job titles of people in your organization be made to more clearly reflect their function? Callers who are confused about who to ask for will usually begin at the top.

18. Keep a pad and pencil next to your phone at all times.

19. Have the appropriate reference material ready for each of your outgoing phone calls.

20. Group your outgoing calls. Make as many calls as you can at one time.

21. Place your own calls when you are reasonably sure you will reach the other person. If your assistant places your call, it is time-wise to stay around to take the call when the other person is on the line.

22. Your local telephone company can arrange conference calls for you. This saves the time of several persons having to assemble in one place for a conference. If they are widely separated, it would also same on travel expense.

23. Use an amplifying device if it is agreeable to the other person. In this way a colleague can hear the conversation and you will be saved the time it would take to brief your colleague later.

24. Occasionally stand up when you call. It will help to relieve tensions and make you sound more enthusiastic.

25. Tell your secretary not to put calls through to you during specific periods throughout the day. this action allows you to accomplish other assignments without interruption by phone.

26. Gesture when you speak on the phone. Even though your gestures cannot be seen, they can be heard through your voice. Your voice will pick up their tone and inflections and you will be more quickly understood.

Reynolds, H., & Tramel, M. E., Executive Time Management. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1979.

RESOURCE J

Tips on Time

I Save Time with Right Attitudes.	**Yes**	**No**
I try to get some satisfaction out of every hour.	☐	☐
I find elements of enjoyment in whatever I am doing.	☐	☐
I pat myself on the back for successes, extract learning from failures.	☐	☐
I will gladly kiss old habits goodbye if they are nonproductive.	☐	☐
I write out my goals and keep them in mind. I use wall-signs.	☐	☐
I revise them when they have been accomplished or are outmoded.	☐	☐
I give myself rewards for important accomplishments.	☐	☐
I view other people's time as valuable.	☐	☐
I view my own time as valuable.	☐	☐
I try to remain alert, focused and concentrating.	☐	☐
I will try to listen actively.	☐	☐
I Save Time by Organizing (But Not Over-Organizing).		
I try to avoid useless clutter: mental, emotional, physical.	☐	☐
I make a definite effort to have a place for everything and keep it there.	☐	☐
I make a definite effort to have a given time for specific activities and to handle them with some system.	☐	☐
I plan specific "areas" at home and at work so specific activities are more easily implemented.	☐	☐
I make a list each night of things to be done next day.	☐	☐
I indicate priorities.	☐	☐
I work on first things first.	☐	☐
As much as possible, I concentrate on one task at a time.	☐	☐
I make room for "planned emergencies" if emergencies seem to be a standard part of my day.	☐	☐
I keep necessary supplies in stock and ready to use.	☐	☐
I make my organization plan known to those involved.	☐	☐
I plan part of my day to start before others start or to continue after others are gone.	☐	☐
I set up times when I am available to others.	☐	☐
I learn what are my most productive times of the day—early morning or late evening.	☐	☐
I make my organization plan known to those involved.	☐	☐
I Save Time by Future Planning.		
I try to coordinate today's tasks, next weeks, next month's, next year's.	☐	☐
I draw up visual charts of how different efforts coordinate.	☐	☐
I keep those charts where I can see them. I revise when necessary.	☐	☐
I start with the most profitable parts of projects so I can get energy from a sense of progress.	☐	☐
I consult those whose time will be involved with mine.	☐	☐
I Save Time by Saving Me.		
I plan part of each day for my physical well-being.	☐	☐
I plan short periods of rest, relaxation and restoration.	☐	☐
At least once a week I plan for me to be "just me."	☐	☐
I use waiting or bits and pieces of time for growth and development.	☐	☐
At least once each day I try to have some exchange with a stimulating person.	☐	☐

I Save Time by Using All the Help I Can Get.	**Yes**	**No**
I delegate everything I possibly can.	☐	☐
When I have reached my limit of assignments, I use my assertive techniques to say "no" graciously.	☐	☐
I try to use special people to help with special assignments.	☐	☐
If I have a secretary or other helpers, I try to find all their skills and give them the satisfaction of utilizing all their abilities.	☐	☐
I Save Time by Saving Energy.		
I do not brood over past mistakes. I do my best to rectify them and learn from them. Then I dismiss the thought of them.	☐	☐
I try not to waste energy in procrastination. When I find myself putting off an important task, I ask myself what I am trying to avoid. Then I confront the issue.	☐	☐
I try to handle mail or other paper only once.	☐	☐
I try to "think on paper" so I retain concentration and have records of my thought processes.	☐	☐
I try tactfully to keep limits on conversations, in person or on the telephone.	☐	☐
I try as much as possible to keep interruptions at a bare minimum, even when I must be "tough" to accomplish this.	☐	☐
I face the fact that I cannot remain in control of everything and everybody and do not fret over lost control. I simply try to regroup as soon as possible.	☐	☐

Taken from: "Effective Time Management," by Mary O'Sullivan, 1983.

RESOURCE K

Telephone Survey of Time Wasters
(46 DVIs responded to the Questionnaire)

	Rank	Number of Responses
1. Unclear communications	1	11
2. Visitors	2	9
3. Scheduling	3	8
4. Inability to say no	4	7
5. Paperwork	5.5	6
6. Crisis situations	5.5	6
7. Meetings	7.5	5
8. Working with students on academics (other than DVI related)	7.5	5
9. DVI - add-on of responsibility	10.5	4
10. Telephone	10.5	4
11. Travel time between schools	10.5	4
12. Preparation for Spec. Educ. classes (other than DVI)	10.5	4
13. Typing	13.5	3
14. Poor staff attitude	13.5	3
15. Vocational education teacher leaves classroom (DVI left with total responsibility)	17	2
16. No easy telephone access	17	2
17. Lack of specific goals for Spec. Educ. Department	17	2
18. Follow-up with Voc. Educ. teachers	17	2
19. Sharing a classroom (constant interruptions)	17	2
20. IEP development	24	1
21. Cannot get people together for a meeting	24	1
22. Reviewing materials	24	1
23. Filling out information folders for voc. educ. teachers	24	1
24. Visiting schools	24	1
25. Follow-up on unimportant tasks	24	1
26. Lunch hour supervision	24	1
27. Preparing student materials	24	1
28. Working with students one to one	24	1

ADVISORY COMMITTEE

Advisory committees can be an effective communication tool for the DVI. This is true whether the DVI develops an advisory committee, specific to their program, or uses an existing vocational education advisory committee. An advisory committee can provide needed support for present and future planning.

The primary function of the DVI advisory committee is to provide direction for the DVI project within a particular district. This allows the DVI to get input and expertise from several areas, such as special education, vocational education, parents, community agencies, businesses, and residents. Another benefit of a DVI advisory committee is that ownership of the DVI concept becomes broadened. It becomes more than a vocational educator/special educator project. The DVI advisory committee can be used to promote and publicize the DVI project within the school district and the community.

DVI participation in existing vocational education advisory committees can also provide support for the DVI approach. This provides an opportunity to obtain information about occupationally relevant issues and long-range planning in vocational education. It also allows the DVI the chance to promote the employability potential of handicapped learners. This might include using existing vocational education advisory committees or an advisory committee specific to the Designated Vocational Instruction Model.

Guidelines for advisory committees apply to any type, whether in a specific content area or broader field. The following information from the Department of Public Instruction, originally written for business education, contains helpful guides for any advisory committee.

RESOURCE A

Information on Advisory Committees

1. Definition of Advisory Commmittee

   A committee invited to assist in the development and maintenance of a local vocational program. The committee acts in a consultative capacity and is responsible for making recommendations and suggestions to school authorities empowered to act upon the advice offered.

2. Types of Advisory Committees

   A. General Advisory Committees assist in the development, maintenance, and coordination of a total vocational program for a school and school district. It helps to 1) discover the training needs of the service area to ensure a realistic and practical program, 2) develop community understanding of vocational education, and 3) provide support for vocational education to build respect and prestige for the school (10-20 members).

   B. Departmental Advisory Committees serve a single department's vocational program, such as office education, agriculture-related programs, wage-earning homemaking programs, distributive education, or trade and industry (5-9 members).

   C. Single-Field Committees assist in the development of realistic programs in a very specific area, such as accounting, secretarial training, or data processing (5-9 members).

   D. Steering Committees are temporary in nature, are representative of many publics in the community, and are often formed to give temporary direction to a new or improved vocational education program (15-25 members). It should be disbanded after the new program has begun.

3. Advisory Committee Members

   The following considerations are important in selecting advisory committee members:

   A. Experience—A committee member must have had recent, successful, first-hand, practical experience in the occupational area which the committee is to serve.

   B. Available Time—A committee member must be available for all meetings of the committee.

   C. Type of Person—The person should be enthusiastic about their vocation. A committee member must be responsible, civic-minded, and cooperative. The most aggressive and ambitious person does not always make the best committee member, nor does one concerned with only the selfish interest of a small group.

   D. Community Representation — Membership must be representative of the employment community or area. Both men and women should serve on the committee. Committee groups to be considered include:
      - Employers
      - Employees (including mid-management)
      - Vocational/Technical School Personnel
      - Wisconsin State Employment Service
      - Parents
      - Organized Labor
      - Civic Clubs
      - Professional Clubs
      - Clergy
      - Chamber of Commerce
      - Recent graduates of program (if not a new program)
      - Press, Radio, TV

Members selected may represent more than one group (e.g., employers, professional club, parents).

4. Length of Service

Members are generally invited to serve for three-year terms. Replacements should be staggered so there are always some experienced members let on the committee. One plan is to replace one-third of the members each year.

5. Appointment of Committee Members

The professional staff person who works most closely with an advisory committee should have the authority to select or recommend committee members. However, final authority for approval of appointments always remains with the Board of Education. A formal invitation to serve on an advisory committee must always come from the Board or its designated representative (usually the Superintendent of Schools). An invitation to serve coming from the Superintendent of Schools lends an additional air of importance to the call.

6. Number of Meetings

There is no generally accepted policy on the maximum number of meetings to be held each year. Meetings may be called at regular intervals or at times when there is felt a need. Committees that are active and involved usually meet more frequently than those which are only formed to satisfy federal program requirements. Communicate with committee members between meetings to ensure that they are kept fully informed and up-to-date on what is happening in the program.

7. The Role of the Advisory Committee

The school representative sets the tone for an advisory committee. They are responsible for utilizing to the fullest extent the knowledge and expertise of the community members called together.

Committee members must be instructed in the functions and objectives of vocational education. Some advisory committees have been handicapped because they were ignorant of what the educational process involved--they were unable to interpret the program to the public or to appreciate the methods used by the school in achieving its objectives.

The school representative must first explain to the committee members the general operating policies of the state plan and federal acts dealing with vocational education. They should spend a major portion of the first meeting of a new committee explaining these principles and introducing the members to the activities of the school. Every new member will have to be oriented in a similar, laborious way, but time spent in doing so will be repaid by the informed enthusiasm and intelligent activity of instructed members. It is important that the roles of the local vocational coordinator and coordinating teachers are explained.

The school administration or school representative is responsible for keeping a committee fully informed of the progress of each phase of training leading toward the objectives of the program. The members of the committee should be made to realize that the program can win respect only through their complete cooperation in planning and operation. If periodic reports of progress resulting from committee action are made, members will soon develop a sense of pride in achievement. They will want to expand the school's activities and add to its reputation.

8. Invite Committee Members to School Events

Committee members should be invited to visit the school often. They should attend school functions like department meetings, graduation exercises, special assemblies, and social gatherings. Noon luncheon meetings in the school bring an advisory committee nearer to real school life. The informal atmosphere of it also presents a good opportunity for intro-

ducing the staff members and students, as well as the school plant, to committee members.

9. Seek Advice of Committee Members

Advisory committee members will show the greatest continued interest and participation in school projects when their advice is sought frequently about problems familiar to them. A committee will continue its plans for improvement and expansion of the school program only if its former suggestions have been used by the school administration and if democratic procedures have been used in committee meetings. The vocational representative expects to receive real ideas and constructive suggestions, but they will not find a response if they are dictatorial.

10. The Time of Committee Members is Valuable

School authorities should remember that committee members are busy individuals whose time is valuable. They should not be asked to do menial jobs or, at the other extreme, to approach problems which will take independent research to solve.

11. Prepare an Agenda for Each Meeting

The chairperson and the school representative must cooperatively plan a concrete and worthwhile agenda for every meeting. The school representative should be completely familiar with every issue before the committee. They should be able to provide members with all the descriptive and statistical information necessary for comprehensive discussion of a problem, so no time is wasted during the meeting.

Common courtesies and business procedures should be observed. Ample notice should be given of every meeting. The agenda should be sent out with the meeting notice. Copies of the minutes of each meeting should be forwarded to all members as soon as possible after the meeting.

12. Give Credit Generously

Due credit for help should always be given to the committee members by a school representative. Their names should appear in school publications, catalogs, brochures, and releases to newspapers and periodicals. Committee members should be informed as soon as their advice has been accepted and acted upon by the school administration. Furthermore, follow-up reports should be forwarded to them on the effectiveness of the suggested changes and additions. When their proposals are not adopted by the school, committee members should be advised why they are not adopted. These people will be providing you and your students with an invaluable service. Do what you can to bolster their image in your community.

13. Seek Constructive Criticism

The school representative is subject to public appraisal. An advisory committee is a source of lay criticism as well as a source of lay advice. If the members have been wisely chosen, the criticism will be constructive. If the suggestions of the committee members are sensible and sound, they should be adopted whenever it is possible. If the school does not really intend to take the public into its confidence and act upon the public's advice, it should not go through the motions of setting up an advisory committee!

14. Function of the Committee is Advisory

Some school authorities fear that an advisory committee may exceed its specific duties and assume administrative and legislative powers. There is no real reason why the committee should go beyond its proper function if it is handled judiciously from the beginning. If a formal letter of invitation comes to the members from the highest authority in the school system and contains a statement explaining the proper relationship of the committee to the school administration and the Board of Education, there should be no confusion or misrepresentation of powers. If the agenda for the first committee meeting

provides time for a clear statement that the new committee exists only to advise and that the Board of Education and the school staff retain full control over the vocational program, there can be no misunderstanding. Every new member must understand the committee's role.

15. Work of the Advisory Committee Must be Respected

It is extremely important for a school representative to have an honest, appreciative attitude toward their committee. Educators are sometimes inclined to patronize laypeople and to underestimate their interest and intelligence in educational matters. These attitudes must be eliminated if confidence and cooperation are to be expected from advisory committee members. These men and women can be a tremendous source of help and encouragement. They must not be disregarded. If their influence is not appreciated, they will refuse to keep up the pretense of being consulted.

16. Serve the Needs of Students and the Community

The school representative must show their committee that their interest lies in serving the community rather than in gaining publicity for their program. If the committee really believes that the school program is trying to improve future workers and if they are allowed an important part in the development of the program, they will be enthusiastically cooperative. When the school administrator uses and respects the suggestions of an advisory commitee, a vocation can be taught at a practical and functional level.

17. Advisory Committee May Serve Several Schools

An advisory committee may be formed to serve several schools. This is especially useful for schools in communities too small to provide a sufficient base of representation. These communities have similar needs and, therefore, may work well together in utilizing the services of a shared advisory committee. Representation on the committee should be drawn from each community the committee serves. This plan is much more satisfactory than trying to operate with one committee for all vocational programs in each school.

18. List of Suggested Advisory Committee Activities

The advisory committee may aid a vocational program in many of the following ways:

1. Advise on special training needs for specific business occupations.
2. Advise on development of instructional content.
3. Advise on changes and trends in business that affect training and employment.
4. Aid in evaluation of vocational business programs.
5. Help determine the type and quality of facilities and equipment needed in the classroom.
6. Aid in formation of policies and procedures involving business and the school.
7. Visit classes in a vocational program early in year (individually or as a group) to informally welcome students to the program.
8. Form a speaker's bureau—provide at least one speaker per month on topics requested by business students.
9. Devise form for students to evaluate their training section.
10. Help locate job stations for a cooperative education program.
11. Assist in the placement of business graduates.
12. Arrange for appropriate field trips.
13. Arrange for loans and/or gifts of instructional equipment.
14. Send thank-you letters to employers who are participating in cooperative programs.
15. Present panel discussions to students.
16. Present panel discussion explaining the program to civic groups.

17. Secure interest and space for a feature story in the local newspaper and assist in its preparation.
18. Arrange for publicity of programs in monthly bulletins or house organizations or labor organizations, Chamber of Commerce, civic groups, and other organizations.
19. Aid in the selection of aware recipients for any vocational education award program.
20. Participate in special programs on "careers".
21. Attend banquets held which relate to the vocational program.
22. Help secure teaching materials for the classroom.
23. Attend area, state, and national conferences.
24. Assist (as judges) in local, area, or state contests.
25. Assist in providing information concerning desirable aptitudes, attitudes, and the education and experience backgrounds applicants need for entry level jobs in the profession.
26. Assist in obtaining vocational guidance literature for teachers, counselors, and students.
27. Assist in survey of local and state employment and training needs.
28. Assist in development of aptitude and achievement tests related to initial employment of graduates.
29. Assist in placing or helping to place students in jobs during the school year or summer vacations.
30. Assist in preparation and review of budget requests.
31. Help establish and maintain a library of visual aids, magazines, and books for the vocational program.
32. Assist with preparation of the long-range vocational plan and/or in its revision.
33. Assist in developing sample kits, charts, and posters for exhibit of instructional purposes in the classroom.
34. Help arrange meetings of teachers with people in business to bring about a better relationship between school and business.
35. Assist in establishment of teacher qualification requirements.
36. Assist in finding substitutes and resource people from business and industry to assist the local instructor.
37. Advise instructor regarding controversial issues.
38. Conduct inservice programs for teachers of vocational programs.
39. Assist in developing the program of work for the student group.
40. Arrange for scholarships or other financial assistance to students wishing to continue in post-high school programs.
41. Assist in influencing state and federal legislation in ways favorable to vocational education.
42. Assist in identification of needed research in education.
43. Assist teacher in "selling" the importance of summer contracts.
44. Gather evidence regarding community reaction to programs.
45. Help school conform to state wage and hour laws in setting up a cooperative program.
46. Assist in developing a philosophy of education.
47. Assist in developing the objectives of the program.
48. Help provide funds for teachers to attend regional or national meetings of professional organizations.
49. Assist in articulating programs with the area vocational- technical school.
50. Assist in developing programs which may be formulated in cooperation with neighboring high schools.
51. Assist with the training sponsor development program.

LOCAL DVI EVALUATION

Local evaluation of the DVI approach helps to provide for accountability that can be used for future planning. Here are three procedures that have been used to carry out a local evaluation: 1) needs assessment achieved by collecting baseline data, 2) on-going evaluation that provides feedback to vocational educators, special educators, and administrators, and 3) post-assessment to determine how well the program served the identified needs through the strategies that were developed. Each of these approaches to local DVI evaluation is discussed in the following pages.

Needs Assessment

Needs assessment is a process used to determine how individuals involved in the DVI approach feel about how the program meets their needs. The DVIs then are asked to expand their needs related to this program. This procedure is a component of a local evaluation. The DVI must determine the persons who are involved in the program and have them participate in the needs assessment. Resource A, provides a form that can be used to assess program needs.

The needs assessment should involve the following information:

- What does each member expect from the DVI program?
- What is your responsibility in the program?
- What are your needs and concerns for implementation of the program?
- Do you need more inservicing?

The DVI compiles the results of the needs assessment. When this information is collected, specific needs of the local school district can be defined. Goal setting is done by the DVI using baseline data (See Resource B.) See Resource C for an example of a form that can be used for planning DVI goals and objectives. Communication among vocational education and special education staff, administration, principal, guidance counselor, and other personnel is important to the goal-setting process.

Developing an Evaluation Format

The DVI program can be evaluated by using information and/or data related to one or more of the following considerations:

- Number of students with EEN serviced by the DVI receiving passing grades (See Resource D).
- Number of students with EEN working within a competency-based instruction who are attaining their level of competency (See Resource E).
- Increased number of students with EEN mainstreamed into vocational areas in advanced vocational classes.
- Increased student with EEN enrollment in vocational education.
- Better and more open communication.
- More appropriate placement in vocational classes.
- Decrease in vocational education dropouts.
- Increase in administrative support.
- Increase in vocational educators initiating modifications.
- Parental response to programming.
- Increase to continuing student interest in vocational strands.
- Improved attendance.
- Quality of instruction (See Resource F.)

There are numerous ways to develop an evaluation plan. The evaluation plan must be specific to the individual school district. Refer to Resource A to determine considerations in developing your evaluation plan. Once a decision has been made regarding an evaluation plan, the next step is to develop a format. In planning for the format of evaluation, consider the following factors: 1) length, 2) measurement methods, 3) time statement, 4) team members involved, and 5) purpose of evaluation.

On-Going Evaluation

On-going program evaluation monitors the result of the DVI process/program in a

systematic way and compiles results for the purposes of accountability and planning. The goals established in the needs assessment, at this point, are being implemented. The DVI's role is to monitor in an on-going manner the success of the implementation. This can be done in a formal or informal manner. Informal evaluation will occur through observation, interviews, and working with students with EEN in regular vocational education classes. Information gained in this manner will not provide statistical accountability, but it will be useful in targeting areas in need of formal evaluation. Formal evaluation is statistical in nature, and will provide for the accountability that the DVI program will need. The degree of involvement in an evaluation procedure can be as formal as compiling data into an evaluation handbook or presenting on a quarterly basis the DVI accomplishments. (See Resource G).

Post-Assessment

Post-assessment is the process of evaluating the impact of your program. Either the total program or specific components of that program can be evaluated for administrators, special educators, vocational educators, and other personnel. It consists of compiling data to determine if the DVI program is a viable program. Post-assessment should include formal post-school follow-up of EEN students who have completed their high school experience. Analysis of the results should determine needed adjustments in vocational education offerings and special education parallel instructional support. The post-assessment is the basis for planning improvements of the DVI concept for future years and it provides feedback regarding post-school placements of EEN students.

RESOURCE A

Program Evaluation Planning Worksheet

1. Specify the goals of your DVI program to be evaluated.

2. List the specific roles of each team members in activities (a) to (f) below:

   a. Designing the study
   b. Data collection
   c. Data analysis interpretation
   d. Writing the report
   e. Reporting the results
   f. Acting on the results

3. List the timetable for completing each of the following activities of the planned research projects:

	Date: Start	Finish
a. Designing the study	_____	
b. Data collection	_____	
c. Data analysis	_____	
d. Completed report	_____	
e. Action on the results	_____	

4. Identify some sources of available data for the study:

   Locations:

   ☐ a. Manual student/client records
   ☐ b. Other manual records
   ☐ c. Computerized student/client data
   ☐ d. Computerized agency data
   ☐ e. Manual agency data
   ☐ f. Machine readable data available
   ☐ g. _____

5. Statisitical analysis used in the study: (Check where applicable)

   ☐ a. Correlation analysis
   ☐ b. Test of significance
   ☐ c. Frequency and percentage
   ☐ d. Other

6. Methods of dissemination:	Presented by:	Presented to:
Informal communication	_____	_____

Report to certain persons only	_____	_____
Formal report	_____	_____
News release	_____	_____
DVIs	_____	_____
Other	_____	_____

7. **What are the changes that can be made in the program?**

8. **What are the plans for implementing the possible recommendations which may be indicated by the results of the evaluation?**

9. Additional notes and comments:

Adapted from the Research Project Planning Worksheet (author & date unknown)

RESOURCE B

EVALUATION REVIEW SHEET

DVI: _____

SCHOOL: _____

DATE: _____

I. Goals for the _____ school year.

_____

_____

_____

_____

_____

Objectives:

1. _____
2. _____
3. _____

II. Evaluation Statement:

_____

_____

_____

_____

_____

_____

_____

_____

_____

RESOURCE C

LOCAL DVI EVALUATION PLANNING - WORKSHEET

NAME: _____

LOCATION: _____

SCHOOL YEAR: _____

I. Goals statement:

_____

_____

_____

Specific Objectives:

_____

_____

_____

_____

Where I am now?

_____

_____

_____

Where I want to go?

_____

_____

_____

What I need to get there?

_____

_____

_____

RESOURCE D

Evaluation for Grading Systems

DVI: _____ **School:** _____ **School Year:** _____

Course Name/ Instructor	Student's Name	LD	ED	MR	Grading Period 1	Grading Period 2	Semester Grade	Grading Period 3	Grading Period 4	Semester Grade

Result Statement: Total # of students with EEN mainstreamed in regular classes: _____
Total # of students with EEN receiving DVI services: _____
Total number of students with EEN receiving: A ____; B ____; C ____; D ____; E ____; F ____; I ____; N ____; Other ____
Percent of students with EEN who received a passing grade: _____

RESOURCE E

DVI EVALUATION FOR COMPETENCY-BASED INSTRUCTION

DVI: _____ **School:** _____ **School Year:** _____

Course Title	Educator	Student's Name	First Grading Period	Second Grading Period	Third Grading Period	Fourth Grading Period	Year End Total	Goals Mastered Competency

Competencies Mastered:

Result Statement: Total number of students with EEN receiving DVI services: ____
Total number of students with EEN working within a competency-based instruction: ____
Percent of students who have successfully attained their goal: ____

RESOURCE F

LOCAL DVI EVALUATION FOR VOCATIONAL INSTRUCTORS

NAME: _____

JOB TITLE: _____

SCHOOL DISTRICT: _____

Please check your response using the following scales:

SD = Strongly Disagree
D = Disagree
A = Agree
SA = Strongly Agree

	SD	D	A	SA
1. My involvement in the decision which results in a handicapped student's enrollment in my class.	☐	☐	☐	☐
2. The quantity and quality of information, regarding the vocational interests and aptitudes of handicapped students, available from DVI to assist me in making vocational class placement and individualized programming decisions.	☐	☐	☐	☐
3. My involvement in assisting the DVI to develop an individualized educational program (IEP) for each handicapped student enrolled in my class(es).	☐	☐	☐	☐
4. The level of direct assistance I have received from the DVI when handicapped students are placed in my class(es).	☐	☐	☐	☐
5. I feel there is a sufficient process of monitoring student progress in vocational classes.	☐	☐	☐	☐
6. In-service training you have received to prepare you to be involved in the DVI Pilot Project.	☐	☐	☐	☐
7. Feedback you have received on how effectively you serve the special needs of students.	☐	☐	☐	☐
8. Extent to which your program advisory committee is used to advantage of students with special needs.	☐	☐	☐	☐

RESOURCE G

DVI ACCOMPLISHMENTS FOR FIRST QUARTER

1. All teachers who had EEN students enrolled in their vocational classes were given folders that contained the following information about those EEN students:

   A. A behavioral checklist of both appropriate and inappropriate behaviors that they could expect to see from that student.

   B. Current academic functioning of that student in the areas of reading, spelling, and math.

   C. A list of very individualized "classroom suggestions" that the vocational teachers could use while working with that particular EEN student.

   D. Also included in these folders, for sophomores only, were the vocational assessment results of the Talented Assessment Program (TAP).

2. I assess the math knowledge on functions of the students in Metal 10. Those that needed additional help were given individual instruction and attention.

3. As DVI, I met with all vocational teachers to jointly write the IEP objectives for each EEN student.

4. The DVI highlighted the Metals 10 textbook for EEN students to use when they do their Study Units. This allows the students to read only the pertinent material that the vocational instructor feels they must know.

5. As DVI, I worked with the vocational instructor in redoing and reorganizing the step-by-step project instructions that are given to the students in the Metals 10 workbook. This allowed the EEN student to get a more concise idea of how the project was set up.

6. As DVI, I shared with the junior high EEN staff the information gathered at the DVI inservice in regard to what the vocational teachers at the junior high wanted as assistance from the EEN staff.

7. The junior high Industrial Art's textbooks were highlighted and color-coded as to the vocational instructor's request.

8. The DVI is accomplishing the daily inservicing of the vocational staff as to the needs of the EEN students.

9. At the conclusion of the first quarter I met with all vocational teachers to check the progress of all EEN students enrolled in the vocational areas.

10. Ninety-five percent of all EEN students enrolled in vocational classes received passing grades!

THE DVI BRIDGE IS TRULY WORKING!!!

Submitted by: Designated Vocational Instructor

RESOURCE H

Student Follow-Up Survey

Please answer these questions about what you do. Parents are asked to fill out the survey for the student if the student is not available. All information will be kept confidential. Thank you for helping us.

Name: _____ Birthdate: _____

Current Address: _____

Phone Number: _____ Year of Graduation: _____

WORK

What is your current employment status?

- ☐ Employed - Full time
- ☐ Employed - Part time
- ☐ Full time military service Branch of Service _____
  Job in Service _____
- ☐ Unemployed - Looking for work
- ☐ Unemployed - and not seeking work
- ☐ Homemakers - Not looking for paid work
- ☐ Homemakers - Looking for paid work

If you are working, please give the following information:

Job title: _____

Job duties: _____

Employer name: _____

Work Address: _____

May we contact your supervisor in our Employer Follow-up? Yes ☐ No ☐

(please give name of immediate supervisor) _____

What is your present **hourly** rate **before deductions?** $ _____/hour

How many hours do you work during an average work week? _____ hours

Is this job related to your area of school training? Yes ☐ No ☐

How did you get your present job?

- ☐ through co-op program
- ☐ Job Service
- ☐ Parents/brother/sister/friend
- ☐ school placement
- ☐ completely on your own

How long did it take you to find your first job?

- ☐ 0-2 months
- ☐ 3-5 months
- ☐ 6-8 months
- ☐ 9-12 months

SCHOOL

Are you going to school now? Yes ☐ No ☐

If yes, check one:

- ☐ a vocational school one year diploma program
- ☐ a vocational school two year associate degree program
- ☐ a four year university program
- ☐ an apprenticeship program
- ☐ an inservice or on-the-job training program
- ☐ other _____

If yes, which school _____

What is your area of study: _____

TRAINING

Have you received any help from an agency? Yes ☐ No ☐

If yes, which one(s)

- ☐ DVR-Div. of Vocational Rehabilitation
- ☐ Social Security Ins.
- ☐ Job Service
- ☐ Welfare
- ☐ Other _____

LIVING ARRANGEMENTS

Are you living with your parents? Yes ☐ No ☐

If no, please check which applies to you:

- ☐ Living with relative
- ☐ Living with husband or wife
- ☐ Living by yourself
- ☐ Group (group home, military)
- ☐ Living with roomate (male or female)

How much money do you contribute each month for

Rent? $ _____
Food? $ _____
Bills? $ _____ Total $ _____

Do you own a car? Yes ☐ No ☐

RECREATION

What do you do when your are not at work? (Check all that apply

- ☐ Play sports
- ☐ Read
- ☐ Take naps
- ☐ Watch T.V.
- ☐ See friends
- ☐ Hobbies
- ☐ Do crafts
- ☐ Go to movies

GENERAL

Did you take any vocational courses while in high school? Yes ☐ No ☐

What high school course(s) did you take that helped you the most in your present situation?

What high school course(s) do you wish you had taken, but did not?

Do you feel the high school helped prepare you for your life now? How?

What additional skills and knowledge could you have used as you went from high school to work or further education?

Comments or other information you would like to share.

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